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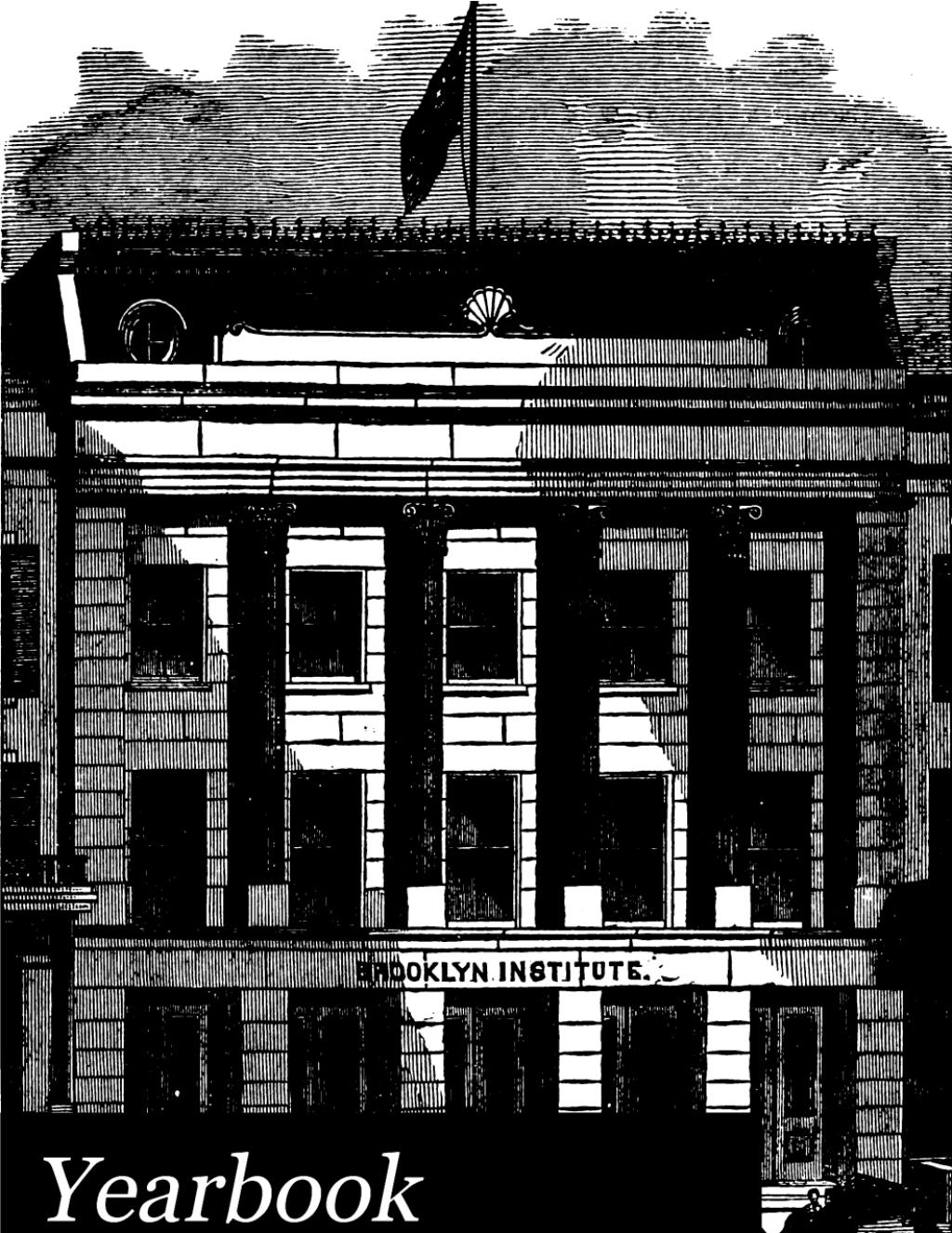
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# Yearbook

Brooklyn Institute of Arts and Sciences

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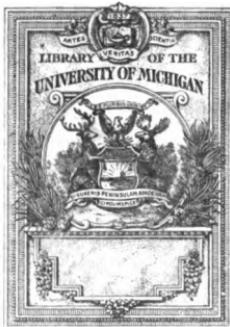
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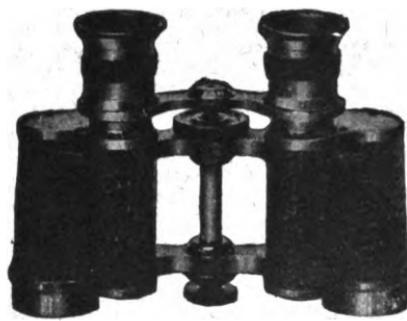
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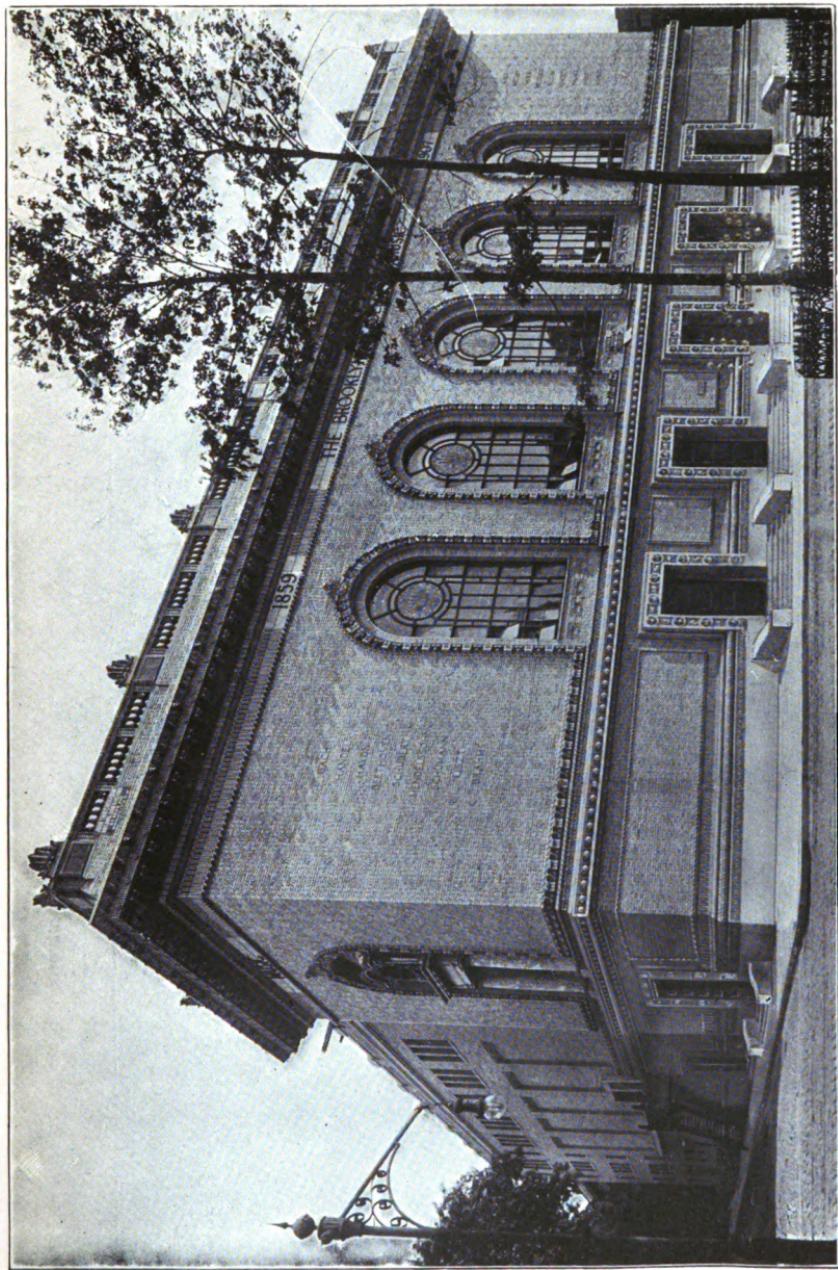
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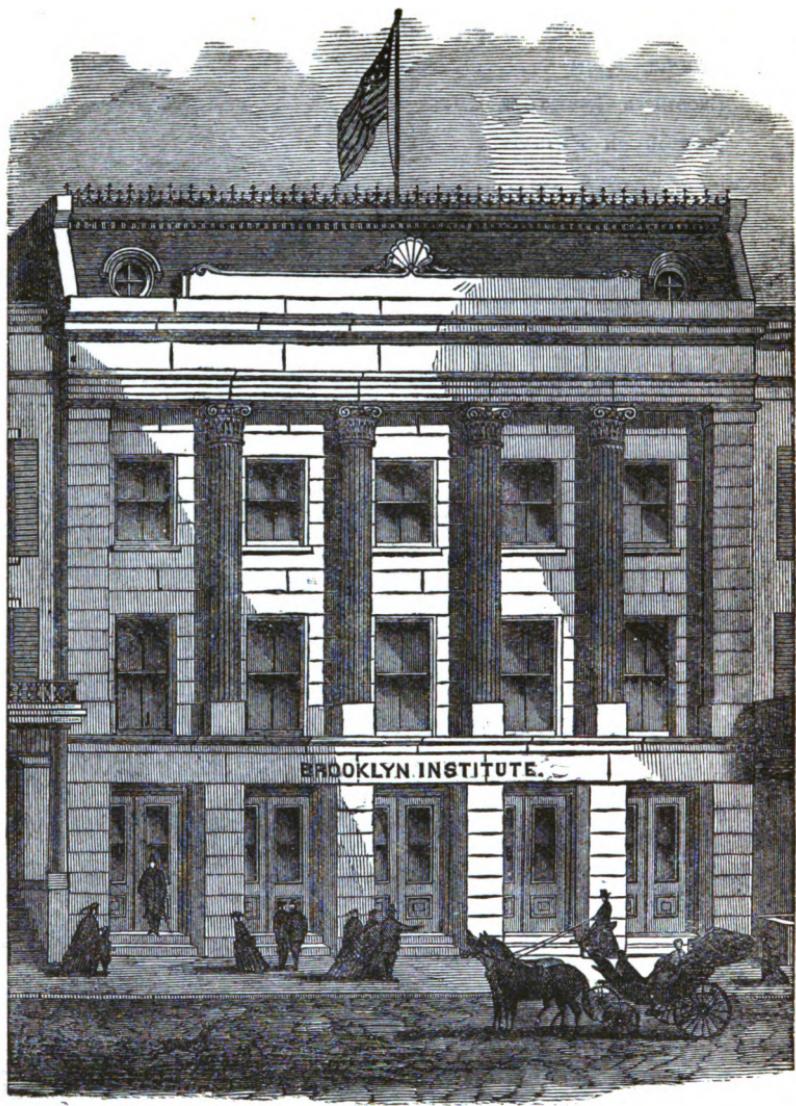
## CONTENTS

	PAGE
BOARD OF TRUSTEES .....	9
COMMITTEES OF THE BOARD .....	10
PAST OFFICERS OF THE BOARD .....	12
COUNCIL OF ASSOCIATE MEMBERS .....	13
COMMITTEES OF ASSOCIATE MEMBERS .....	14
OFFICERS, CURATORS AND ASSISTANTS .....	15
BENEFATOR .....	19
PAST HONORARY MEMBERS .....	20
HONORARY MEMBERS .....	21
PAST FELLOWS .....	21
FELLOWS .....	22
PATRONS .....	23
PERMANENT MEMBERSHIPS .....	23
LIFE MEMBERSHIPS .....	27
CORRESPONDING OR NON-RESIDENT MEMBERS .....	33
<b>In Memoriam</b> .....	41
A BRIEF HISTORY OF THE INSTITUTE .....	43
TABLES SHOWING GROWTH OF THE INSTITUTE .....	97
ATTENDANCE .....	98
CONSTITUTION .....	101
BY-LAWS .....	113
WORK OF THE YEAR .....	115
GENERAL LECTURES .....	115
THE GRAHAM FOUNDATION LECTURES .....	116
EXHIBITION BY DEPARTMENTS .....	117
WORK OF THE DEPARTMENTS :	
AGRICULTURE .....	119
ARCHITECTURE .....	121
ASTRONOMY .....	124

267876

WORK OF THE DEPARTMENTS ( <i>Continued</i> ):	PAGE
BOTANY .....	128
CHEMISTRY .....	134
DOMESTIC SCIENCE .....	136
DRAMATIC ART .....	139
ELECTRICITY .....	141
ENGINEERING .....	142
ENTOMOLOGY .....	144
ETHNOLOGY .....	148
FINE ARTS .....	149
GEOGRAPHY .....	156
GEOLOGY .....	163
LAW .....	165
MATHEMATICS .....	168
MICROSCOPY .....	169
THE MICROSCOPICAL EXHIBITION.....	171
MINERALOGY .....	174
MUSIC .....	176
PAINTING .....	187
PEDAGOGY .....	189
THE SCHOOL OF PEDAGOGY.....	196
PHILOLOGY .....	202
PHILOSOPHY .....	216
PHOTOGRAPHY .....	219
THE PHOTOGRAPHIC EXHIBITION .....	222
PHYSICS .....	226
POLITICAL SCIENCE .....	227
PSYCHOLOGY .....	232
SOCIOLOGY .....	233
ZOOLOGY .....	239

WORK OF THE DEPARTMENTS ( <i>Continued</i> ):	PAGE
SCIENCE ROOM .....	241
BROOKLYN INSTITUTE CHESS CLUB.....	244
SECTION ON PHILATELY .....	245
JAMAICA BRANCH .....	247
GARDEN CITY BRANCH.....	249
HUNTINGTON BRANCH .....	251
TABLE SHOWING MEMBERSHIP .....	253
MEMBERSHIP OF DEPARTMENTS .....	254
THE BIOLOGICAL LABORATORY .....	255
THE CENTRAL MUSEUM .....	267
THE CHILDREN'S MUSEUM .....	270
THE BOTANIC GARDEN AND ARBORETUM .....	272
THE ASTRONOMICAL OBSERVATORY .....	277
MUSEUM COLLECTION FUND .....	279
SPECIAL ENDOWMENT FUNDS .....	284
TREASURER'S ANNUAL REPORT .....	288
ACCESSIONS TO THE MUSEUMS .....	295
LIBRARIES OF THE MUSEUM .....	315
ACCESSIONS TO MUSEUM LIBRARIES .....	316
THE BOTANIC GARDEN AND ARBORETUM LAW.....	317
THE ASTRONOMICAL OBSERVATORY LAW.....	320
THE AMENDMENT TO THE CITY CHARTER.....	323
THE CHILDREN'S MUSEUM LAW .....	324
THE PROSPECT HEIGHTS IMPROVEMENT LAW.....	327
THE AMENDMENT OF THE BOTANIC GARDEN AND ARBORETUM LAW, CHAPTER 178, LAWS OF 1911.....	329
THE INSTITUTE MUSEUM LAW OF 1911.....	334
THE AMENDMENT TO THE CHILDREN'S MUSEUM LAW, CHAPTER 130, LAWS OF 1912.....	337



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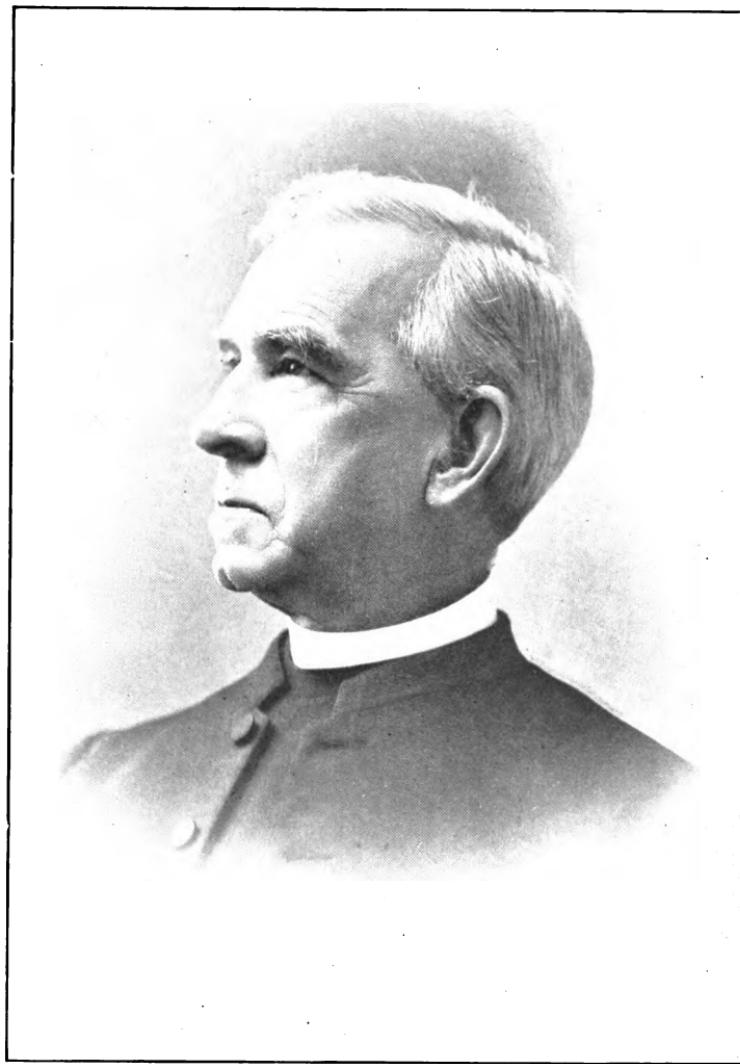
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Rev. ALFRED DUANE PELL	Rev. ALFRED DUANE PELL
ALFRED T. WHITE	ALFRED T. WHITE
1902	
Mrs. CORNELIA L. PELL	Mrs. CORNELIA L. PELL
SAMUEL P. AVERY	SAMUEL P. AVERY
GEORGE FREIFELD	GEORGE FREIFELD
GEORGE D. PRATT	GEORGE D. PRATT
1903	
GEORGE A. HEARN	GEORGE A. HEARN
Mrs. LILLA BROWN	Mrs. LILLA BROWN
1904	
WILLIAM T. EVANS	WILLIAM T. EVANS
FRANCIS GOTTSBERGER	FRANCIS GOTTSBERGER
1905	
CHARLES M. HIGGINS	CHARLES M. HIGGINS
Mrs. EUGENE G. BLACKFORD	Mrs. EUGENE G. BLACKFORD
1906	
1907	
1908	
1909	

1910

*Memberships.*

	<i>Held by</i>
GEORGE C. BRACKETT	Miss MARY A. BRACKETT
Mrs. EMILY LAWRENCE DAY	Mrs. EMILY LAWRENCE DAY
FRANK HEALY	FRANK HEALY
HENRY C. LAWRENCE	HENRY C. LAWRENCE
RICHARD H. LAWRENCE	RICHARD H. LAWRENCE
Mrs. THEODORA LAWRENCE OAKLEY	Mrs. THEODORA LAWRENCE OAKLEY
HERMAN STUTZER, C.E.	HERMAN STUTZER, C.E.
Mrs. MARY LAWRENCE WEBSTER	Mrs. MARY LAWRENCE WEBSTER
Miss FRANCES E. WHITE	Miss FRANCES E. WHITE
Miss HARRIET H. WHITE	Miss HARRIET H. WHITE

1911

LOWELL M. PALMER

LOWELL M. PALMER

## LIFE MEMBERSHIPS

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1866

\*WILLIAM EVERDELL, Jr.  
WILLIAM A. FOWLER  
PHILIP H. HORTON  
THOMAS PROSSER, Jr.

1867

Gen. E. L. MOLINEUX  
GEORGE M. OLcott  
\*GEORGE G. REYNOLDS, LL.D.  
ALFRED T. WHITE

1874

Hon. WILLIAM C. DE WITT

1881

Col. ROBERT B. WOODWARD

1886

Hon. DAVID A. BOODY  
S. B. CHITTENDEN

1887

F. W. BAXTER  
JOSEPH E. BROWN  
FRANKLIN W. HOOPER, M.A., LL.D.  
Col. WILLIS L. OGDEN  
THEODORE E. SMITH

1888

E. M. AARON  
EDWARD L. GRAEF  
NATHANIEL ROBINSON, M.D.

1889

ALVIN BOODY  
Miss ANNA J. BRAINERD

Miss LOUISE S. BRAINERD  
Hon. WILLIAM J. COOMBS  
A. AUGUSTUS HEALY  
HENRY HENTZ  
Mrs. MARTHA H. HOOPER  
FRANK T. KING  
WALLACE GOOLD LEVISON  
Hon. CHARLES A. SCHIEREN  
R. P. S. WEBSTER  
WILLIAM AUGUSTUS WHITE  
\*Hon. STEPHEN V. WHITE

1890

WILLIAM A. ANDREWS  
R. ROSS APPLETON  
RICHARD S. BARNES  
JOHN CLAFLIN  
Hon. EDGAR M. CULLEN  
\*Hon. CARL H. DE SILVER  
Hon. JACOB G. DETTMER  
CONRAD V. DYKEMAN  
Mrs. WILLIAM F. EASTMAN  
JOSEPH FAHYS  
Hon. WILLIAM J. GAYNOR  
Prof. FRANK J. GOODNOW  
EDWARD I. HORSMAN  
\*DAVID H. HOUGHTALING  
JOHN S. JAMES  
Mrs. SMITH ELY JELLIFFE  
GUSTAV LOESER  
WILLIAM H. MAXWELL, LL.D.  
JAMES McMAHON  
Rev. R. R. MEREDITH, D.D.  
CHARLES A. MOORE  
ALERO J. NEWTON  
WILLIAM H. NICHOLS

\*Deceased.

ALEXANDER E. ORR	IRVING A. RULAND
EDWIN PACKARD	CHARLES A. SACKETT
HENRY L. PALMER	Miss LILLIAN SANGER
LOWELL M. PALMER	JUDAH B. VOORHEES
*JOHN R. PLANTEN	Miss FRANCES E. WHITE
ROSSITER W. RAYMOND, Ph.D.	HAROLD T. WHITE
HERMAN STUTZER, C.E.	Miss HARRIET H. WHITE
WILLIAM H. TAYLOR	Miss KATHERINE LYMAN WHITE
JOHN TRUSLOW	Mrs. HORATIO S. WISNER
WILLIAM H. WALLACE	

## 1891

Rev. LYMAN ABBOTT, D.D.	ANDREW D. BAIRD
RICHARD R. BOWKER	Miss MARY BENSON
JOHN M. BULWINKLE	HOWARD BOOCOCK
*Rev. L. T. CHAMBERLAIN, D.D.	JAMES B. BOUCK
RUDOLPHE L. DAUS	MICHAEL J. BRADLEY
Hon. SETH LOW, LL.D.	JOHN W. BROWN
GEORGE L. MORSE	ISAAC H. CARY
RICHARD F. PEARSALL	*Col. HENRY T. CHAPMAN
Mrs. J. A. WISNER	ALBERT DE SILVER

## 1892

H. MESSENGER AYRES, M.D.	THEO. POLHEMUS DIXON
THOMAS B. BRIGGS	JOHN S. FROTHINGHAM
STANLEY H. CHADWICK	BERNARD GALLAGHER
GEORGE H. COOK	Miss MARY A. GUILD
Mrs. MARY S. CROXSON	Miss M. BELL HAZEN
JAMES CRUIKSHANK, LL.D.	Miss FRANCES INGRAHAM
Mrs. FLORENCE W. CUNNINGHAM	OLIVER L. JONES, M.D.
Miss E. W. FROTHINGHAM	Mrs. OLIVER L. JONES
JOHN WHIPPLE FROTHINGHAM	EDWARD H. LITCHFIELD
FRANK HEALY	FRANK H. LOVELL
*THEODORE F. JACKSON	JOHN C. MC GUIRE
ETHELBERT IDE LOW	GEORGE TREMAINE MORSE
JOSIAH O. LOW, Jr.	DANIEL A. NASH
FRANK LYMAN	A. E. OVERTON
HENRY L. MAXWELL	Miss R. AUGUSTA POLHEMUS
JAMES L. MORGAN	FRANK SQUIER
Miss MARTHA W. OLcott	LOUIS C. TIFFANY
ASA W. PARKER, Jr.	

## 1894

CLARK BURNHAM, M.D.
Miss ALICE B. CARY

\*Deceased.

MARY, COUNTESS VON FRANCKEN  
 SIERSTORFF  
 WILLIAM B. HALSEY  
 SETH A. KEENEY  
 Miss IDA E. LOWBER  
 Miss MARY LOWBER  
 WILLIAM P. MASON  
 JAMES HOWARD PRENTICE  
 ANTON A. RAVEN  
 BENJAMIN TATHAM

1895

LAWRENCE E. ABRAHAM  
 Miss MARY W. ALLEN  
 Mrs. MARY H. DE SILVER  
 J. HENRY DICK  
 GEORGE L. ENGLISH  
 Mrs. WILLIAM HOWARD GOOD  
 WALLACE P. GROOM  
 Mrs. ADA GIBB HESTER  
 ELIJAH R. KENNEDY  
 GEORGE F. KUNZ  
 Mrs. MARTHA R. LYNDE  
 Rev. JAMES TOWNSEND RUSSELL  
 CLARENCE W. SEAMANS  
 \*Gen. STEWART L. WOODFORD  
 Miss MARY B. WOODWARD

1896

HENRY H. BENEDICT  
 Mrs. FRANCES L. BLACKFORD  
 FRANK J. BLYDENBURG  
 Mrs. JOSEPH H. COLYER, Jr.  
 Mrs. MARY K. COVERT  
 Hon. WILLIAM B. DAVENPORT  
 WILLIAM T. GILBERT  
 Mrs. JOHN GOOD  
 Mrs. WILLIAM H. GOODYEAR  
 CHARLES HENRY HALL  
 ALVAN R. JOHNSON  
 Mrs. MARY A. KENNEDY

LYSANDER W. LAWRENCE  
 \*AUGUST LEWIS  
 Mrs. AUGUST LEWIS  
 Very Rev. EDWARD W. McCARTY, LL.D  
 GORDON PARKER  
 \*WILLIAM N. PEAK  
 \*MISS CONSTANCE LOUISE PRAY  
 GEORGE H. PRENTISS  
 THOS. HAROLD PROSSER  
 WALTER RICHARD PROSSER  
 WILLIAM W. WALSH  
 Mrs. J. P. WARBBASSE  
 Hon. TIMOTHY L. WOODRUFF

1897

JOSEPH F. FRADLEY  
 Miss ANNA M. HOAGLAND  
 Miss ELLA J. HOAGLAND  
 Hon. JAMES R. HOWE  
 MARTIN JOOST  
 JOHN H. SCHUMANN

1898

Mrs. MANSFIELD ALLAN  
 Miss ALICE HILL CHITTENDEN  
 JOHN DOHSE  
 JULIAN D. FAIRCHILD  
 Mrs. MARY CHITTENDEN HOLLY  
 FRANK S. JONES  
 Mrs. ALBERT H. MATHEWS  
 Miss MARY A. MERWIN  
 HORACE J. MORSE  
 P. ELBERT NOSTRAND  
 Mrs. MARY STORRS PACKARD  
 Miss BESSE TAYLOR  
 Mrs. ADRIAN VAN SINDEREN  
 Mrs. EDWARD H. WEBSTER

1899

EDWARD ADAMS  
 Mrs. EDWARD ADAMS  
 JOHN WINFRID AGER

\*Deceased

Miss MARY ARNOLD	Mrs. W. BURDETTE O'CONNOR
Mrs. JANE A. BENSON	CHARLES JONES PEABODY
Mrs. MONTAGUE FLAGG	HON. HARRINGTON PUTNAM, LL.D.
WILLIAM T. GIBB	SHEPHERD STEVENS
DAVID F. GOODNOW	ANDREW T. SULLIVAN
HENRY R. GOODNOW	RICHARD YOUNG
WESTON W. GOODNOW	
CHARLES E. PERKINS	1904
RUSSELL E. PRENTISS	Rev. JAMES JOSEPH BANBURY
Miss EDITH A. SHATTUCK	Rev. EGISTO FABRI CHAUNCEY
Mrs. ANNA B. SHELDON	GATES D. FAHNESTOCK
Miss SUSAN M. VAN ANDEN	Miss EMMA ELOISE FOSTER
JOHN J. WILLIAMS	DWIGHT H. KELLOGG
	Rev. JOHN HOWARD MELISH
1900	
Miss ELIZABETH FIELD	1905
SANFORD H. STEELE	Mrs. CECILIA BUEK
	Mrs. JEREMIAH CROWELL
1901	Mrs. THEODORE G. EGER
Miss EMMA A. BROCKWAY	ANTON EILERS
Rev. S. PARKES CADMAN, D.D.	SIDNEY GREEN
WILLIAM LINCOLN CHAPEL	WILLIAM B. HILL
Mrs. M. H. S. HULST	Mrs. E. M. KENT
Mrs. THEODORE JACOBY	Miss JULIA W. LATIMER
ALFRED G. MAYER, Ph.D.	Miss ALICE L. MORSE
Rev. S. D. McCONNELL, D.D.	JOHN J. PIERREPONT
J. ADOLPH MOLLENHAUER	THOMAS POTTS
	GEORGE C. ROBINSON
1902	HENRY SHELDON
Miss DOROTHY CHAPEL	Mrs. FANNIE AVERY WELCHER
Miss GERTRUDE CHAPEL	
Miss IVY HOWE CHAPEL	1906
Miss LIZZIE A. FERRIER	FRITZ ACHELIS
GEORGE A. HEARN	CHARLES H. BATTERMAN
DAVENPORT HOOKER	A. B. BAYLIS
ALBERT E. LAMB	WILLIAM BAYLIS, Jr.
Rev. ROBERT McDONALD, D.D.	Miss LEILA HARTWELL CHAPMAN
Mrs. AMY MOODY	Mrs. LEILA TISDALE CHAPMAN
ROBERT R. WALBRIDGE	Mrs. MARY BAXTER CULLEN
	ARCHIBALD BAXTER DALBY
1903	Mrs. FREDERIC S. DENNIS
JOHN COCKS	Mrs. KATE DURYEA
Mrs. CHARLOTTE C. DAVENPORT	

ALFRED SHERMAN FOOTE	IRA L. GIFFORD
Miss HELEN H. FROTHINGHAM	Mrs. SARAH PROCTOR HOWE
Miss DOROTHY BRADFORD HAM	Rev. WILLIAM S. HUBBELL
ARTHUR M. HATCH	Miss JULIE HUSSON
HAMPTON HOWELL	Miss ROSE RUSCOE
STEWART LEE JEFFREY, M.D.	Mrs. TALCOTT H. RUSSELL
Mrs. IRENE S. KENYON	Miss MARIE LOUISE SCHLEGEL
WHITMAN W. KENYON	HELMAR SNOW
WHITMAN W. KENYON, Jr.	*MARGUERITE STORRS VALENTINE
EDWARD H. LITCHFIELD, Jr.	P. A. VALENTINE
E. HUBERT LITCHFIELD	Mrs. LOUISA B. VAN NOSTRAND
WILLIAM W. MARSHALL	RICHARD VAN WYCK
CHARLES L. MORSE	Mrs. HERMAN CARL WEBER

## 1908

Mrs. LOUIS HARMAN PEET	Miss CLARA E. BATTERMAN
JOHN J. PIERREPONT, Jr.	Miss MINNIE P. BATTERMAN
SETH LOW PIERREPONT	PHILIP BRASHER
JAMES TOWNSEND RUSSELL, Jr.	REGINALD R. BRASHER
Miss EUNICE MORGAN SCHENCK	Miss BERTHA CHAPMAN
HARRIE VICTOR SCHIEREN	Rev. L. MASON CLARKE, D.D.
Mrs. JULIA G. SLACK	WALTER B. FARMER
Miss LUCELLA C. SMITH	Miss CAROLINE E. HARRIS
DOUGLAS MACCOLLUM STEWART	WILLIAM T. HORNADAY
Miss HELEN WARD	Mrs. LAURA K. HUDSON
Mrs. ALFRED T. WHITE	Miss M. KATHERINE HUSTED
SUMNER B. WHITNEY	GEORGE S. INGRAHAM
Mrs. SARAH ADELINA WORDEN	DAVID MOFFAT
	WILLIAM L. MOFFAT, Jr.
1907	Miss LILLIAN L. OTIS
Miss DORIS ARNOLD	DONALD MANSON OGILVIE
Miss A. W. BROWN	Mrs. ADOLPH RUGER
CHARLES R. BUCKLEY	Mrs. FANNIE VAN N. RAMSDELL
JOHN D. BUCKLEY	FRANCIS H. SLOAN
HOWARD CORLIES	Miss CAROLINE T. SUSSDORFF
WALTER H. CRITTENDEN	Mrs. GEORGE S. TUCKER, Jr.
HENRY S. CURTIS	Estate of THEODORE DREIER
DANIEL K. DE BEIXEDON	
FREDERIC S. DENNIS, M.D.	1909
ALBERT MOSES FARRIER	Miss ELEANOR C. BANNISTER
FREDERICK BEACH FARRIER	Hon. JAMES D. BELL
Miss PHOEBE P. FOSTER	
Mrs. LOUISE VAN ANDEN FRANK	

\*Deceased.

Miss S. Ross Dodge  
 Rev. Caleb S. S. Dutton  
 Mrs. Martin Joost  
 Mrs. H. S. Kingsley  
 Hon. Samuel T. Maddox  
 Dick S. Ramsay  
 Hon. George H. Roberts  
 Mrs. Anna K. Thayer  
 Stephen V. White, Jr.

1910  
 William H. Childs  
 Henry St. John Hyde  
 James H. Hyde  
 Mrs. Henry D. Love  
 Clinton W. Ludlum  
 Miss Isabel H. Tuthill

1911  
 Mrs. Lillian W. Betts  
 Edward C. Blum

Miss Elizabeth Bramm  
 Hon. George W. Brush, M.D.  
 William T. Davis  
 Henry W. Healy  
 Rev. Arthur Mercer  
 Miss Emily W. Unkles

1912  
 Henry L. Batterman  
 Justin McCarty, Jr.  
 Miss Emily W. Jones  
 Hon. George McAneny

1913  
 William C. Courtney  
 Andrew Dougherty, Jr.  
 Edward J. Dougherty  
 Daniel V. B. Hegeman  
 Col. William Hester  
 James Shevlin  
 Mrs. William Ziegler

## CORRESPONDING MEMBERS

---

### ARCHITECTURE

Prof. FRANCIS W. CHANDLER, M.A.	Mass. Institute of Technology
Prof. WARREN POWERS LAIRD	Philadelphia, Pa.
ROBERT S. PEABODY	Boston, Mass.
WILLIAM R. WARE	Boston, Mass.

### ASTRONOMY

Prof. SOLON I. BAILEY, M.A.	Cambridge, Mass.
Prof. EDWARD EMERSON BARNARD, M.A., D.Sc.	Yerkes Observatory, Williams Bay, Wis.
JOHN A. BRASHEAR, D.Sc., LL.D.	Allegheny, Pa.
Prof. W. R. BROOKS, M.A., F.R.A.S.	Phelps, N. Y.
Prof. SHERBOURNE W. BURNHAM	Williams Bay, Wis.
Prof. J. R. EASTMAN	Washington, D. C.
WILLIAM H. EDWARDS	Coalburgh, Pa.
Prof. W. L. ELKIN	New Haven, Conn.
Prof. EDWIN B. FROST	Williams Bay, Wis.
Prof. GEORGE E. HALE, D.Sc.	Mt. Wilson, Cal.
Prof. ASAHP HALL, M.A., Ph.D., LL.D.	Washington, D. C.
Prof. EDWARD S. HOLDEN	Washington, D. C.
PERCIVAL LOWELL, M.A.	Boston, Mass.
Miss ANTONIA C. MAURY, B.A.	Hastings, N. Y.
Prof. C. H. MCLEOD, M.E., F.R.S.	Montreal, Canada
Prof. THOMAS B. OSBORNE, Ph.D.	New Haven, Conn.
FRANK A. PERRET	Royal Observatory, Mt. Vesuvius
Prof. EDWARD G. PICKERING, B.Sc., LL.D.	Cambridge, Mass.
Prof. WILLIAM H. PICKERING, B.S.	Cambridge, Mass.
Prof. GEORGE W. RITCHIE	Mt. Wilson, Cal.
Prof. WILLIAM A. ROGERS	Cambridge, Mass.
J. H. SERVISS	Bonne Terre, Mo.
Prof. ORMOND STONE	University of Virginia
Prof. LEWIS SWIFT, Ph.D., F.R.A.S.	Marathon, N. Y.
Prof. DAVID P. TODD, Ph.D.	Amherst College
Prof. FRANK W. VERY, M.A.	Arcturus, Fairfax Co., Va.
Prof. SARAH F. WHITING	Wellesley, Mass.
Prof. W. C. WINLOCK, B.A.	Washington, D. C.

## BOTANY

Prof. L. H. BAILEY, LL.D.	Ithaca, N. Y.
Prof. WILLIAM BATESON, M.A.	Cambridge, England
Prof. HERBERT W. CONN, Ph.D.	Middletown, Conn.
Prof. WILLIAM G. FARLOW, Ph.D.	Cambridge, Mass.
Prof. B. E. FERNOW	Washington, D. C.
Prof. GEORGE L. GOODALE, M.D., LL.D.	Cambridge, Mass.
Prof. BYRON D. HALSTEAD, D.Sc.	New Brunswick, N. J.
WALTER HOUGH	Washington, D. C.
Prof. LEWIS R. JONES, Ph.D.	Madison, Wis.
Prof. WILLIAM T. SEDGWICK, Ph.D.	Boston, Mass.
GEORGE M. STERNBERG, M.D.	San Francisco, Cal.

## CHEMISTRY

Dr. WILDER D. BANCROFT	Ithaca, N. Y.
Prof. R. H. CHITTENDEN, Ph.D.	New Haven, Conn.
FRANK WIGGLESWORTH CLARK, B.Sc.	Washington, D. C.
CHARLES B. DUDLEY, B.A., Ph.D.	Altoona, Pa.
Dr. W. F. HILDEBRAND	Washington, D. C.
CHARLES S. HOLDEN, M.D.	Attleboro, Mass.
Prof. HARRY C. JONES, Ph.D.	Baltimore, Md.
Dr. LOUIS KAHLENBERG, Ph.D.	Madison, Wis.
HENRY LEFFMAN, M.D.	Philadelphia, Pa.
Prof. CHARLES E. MONROE	Washington, D. C.
Prof. ARTHUR A. NOYES	Boston, Mass.
Dr. W. A. NOYES, Ph.D.	Urbana, Ill.
Mrs. ELLEN H. RICHARDS, B.Sc., M.A.	Boston, Mass.
Prof. THEODORE W. RICHARDS, Ph.D., D.Sc., LL.D.	Cambridge, Mass.
Prof. SAMUEL P. SADTLER, B.Sc., Ph.D.	Philadelphia, Pa.
E. A. DE SCHWEINITZ, M.D.	Washington, D. C.
Dr. EDGAR F. SMITH	Philadelphia, Pa.
Dr. JULIUS STREGLITZ	Chicago, Ill.
Prof. WILLIAM G. TUCKER, M.D., Ph.D., F.C.S.	Albany, N. Y.
Dr. WILLIAM F. WHITNEY	Schenectady, N. Y.
Prof. HARVEY W. WILEY, M.A., Ph.D., LL.D.	Washington, D. C.

## DOMESTIC SCIENCE

MARY GREEN, M.D.

Charlotte, Mich.

## ELECTRICITY

Prof. A. E. KENNELLY, Ph.D.  
 Prof. WILLIAM K. ROENTGEN  
 CHARLES P. STEINMETZ, Ph.D.

Cambridge, Mass.  
 Wurtzburg, Germany  
 Schenectady, N. Y.

## ENGINEERING

G. C. F. BROWN  
 RICHARD S. BUCK, C.E.  
 Prof. R. C. CARPENTER, C.E.  
 Prof. A. J. DU BOIS, B.Sc.  
 EDWARD B. HART, Ph.D.  
 WILLIAM KENT, M.E., M.A.  
 GAETANO LANZA, C.E.  
 H. W. RAYMOND  
 Prof. HARRIS J. RYAN, M.E.  
 OBERLIN SMITH, C.E.  
 Prof. W. E. STORY

Naval Station, Newport, R. I.  
 Niagara Falls  
 Ithaca, N. Y.  
 New Haven, Conn.  
 Easton, Pa.  
 Syracuse University  
 Boston, Mass.  
 Germantown, Pa.  
 Ithaca, N. Y.  
 New Brunswick, N. J.  
 Worcester, Mass.

## ENTOMOLOGY

Prof. JOHN H. COMSTOCK, B.Sc.  
 Prof. LELAND O. HOWARD, Ph.D.  
 Prof. GEORGE MACLOSKE, LL.D.

Cornell University  
 Washington, D. C.  
 Princeton, N. J.

## ETHNOLOGY

CHARLES C. ABBOTT, M.D.  
 J. WALTER FEWKES, Ph.D.  
 Miss ALICE FLETCHER  
 Prof. OTIS T. MASON, M.A., Ph.D.  
 ALBERT P. MAUDSLAY  
 Mrs. GILBERT McCLEURG  
 Prof. FREDERICK W. PUTNAM, M.A., D.Sc.  
 HJALMAR STOLPE, Ph.D.  
 \*WILLIAM WALLACE TOOKER

Philadelphia, Pa.  
 Washington, D. C.  
 Cambridge, Mass.  
 Washington, D. C.  
 London, England  
 Colorado Springs, Colo.  
 Cambridge, Mass.  
 Stockholm, Sweden  
 Sag Harbor, L. I.

## FINE ARTS

FREDERICK HOVEY ALLEN  
 Prof. D. CADY EATON  
 W. M. R. FRENCH  
 WILLIAM H. HERRIMAN  
 J. FREDERICK HOPKINS

Boston, Mass.  
 New Haven, Conn.  
 Chicago, Ill.  
 Rome, Italy  
 Baltimore, Md.

\*Deceased.

Prof. EDWARD S. MORSE, M.A., Ph.D.  
 Rev. HENRY G. SPAULDING  
 Prof. FRANCIS C. VAN DYCK, Ph.D.  
 Prof. JOHN F. WEIR, M.A.

Salem, Mass.  
 Boston, Mass.  
 Rutgers College  
 New Haven, Conn.

### GEOGRAPHY

Duke AMEDEO DI ABRUZZI  
 Rev. CHARLES H. ANDRAS  
 JOHN BRYSON  
 HUBER GRAY BUEHLER, M.A.  
 FREDERICK H. CHAPIN  
 W. A. CROFFUT  
 Prof. CHARLES E. FAY, M.A.  
 HENRY V. HENSHAW  
 BURTON HOLMES  
 Prof. WILLIAM LIBBEY, Ph.D.  
 Prof. THOMAS C. MENDENHALL, Ph.D., LL.D.  
 FRIDTJOF NANSEN, M.D.  
 J. H. NEWELL  
 Prof. WILLIAM H. NILES  
 HENRY G. PEABODY  
 Rear Admiral R. E. PEARY, C.E., U.S.N.  
 Miss ANNIE S. PECK  
 T. McCANTS STEWART  
 Captain ROALD AMUNDSEN  
 Sir ERNEST SHACKLETON, C.V.O.

Rome, Italy  
 Alberta, N. W. Ter.  
 Eastport, L. I.  
 Lakeville, Conn.  
 Hartford, Conn.  
 Washington, D. C.  
 Tufts College  
 Washington, D. C.  
 Chicago, Ill.  
 Princeton, N. J.  
 Worcester, Mass.  
 Christiania, Norway  
 Washington, D. C.  
 Boston, Mass.  
 Pasadena, Cal.  
 Philadelphia, Pa.  
 Providence, R. I.  
 Honolulu  
 Christiania, Norway  
 London, England

### GEOLOGY

Prof. ALBERT P. BRIDGHAM, M.A.  
 JOHN M. CLARKE, Ph.D.  
 Prof. WILLIAM O. CROSBY, B.Sc.  
 Prof. WILLIAM M. DAVIS, M.E.  
 Prof. WILLIAM B. DWIGHT, M.A., Ph.B.  
 Prof. BENJAMIN K. EMERSON, Ph.D.  
 G. K. GILBERT  
 Prof. WILLIAM N. RICE, M.A., Ph.D., LL.D.  
 Prof. WILLIAM B. SCOTT, Ph.D.  
 Prof. GEORGE OTIS SMITH  
 Prof. CHARLES D. WALCOTT  
 WALTER H. WEED, M.D.  
 Prof. G. FREDERICK WRIGHT, D.D., LL.D.

Hamilton, N. Y.  
 Albany, N. Y.  
 Boston, Mass.  
 Cambridge, Mass.  
 Poughkeepsie, N. Y.  
 Amherst College  
 Washington, D. C.  
 Middletown, Conn.  
 Princeton, N. J.  
 Washington, D. C.  
 Washington, D. C.  
 Washington, D. C.  
 Oberlin, Ohio

## MATHEMATICS

Prof. FREDERICK N. WILLSON, C.E., M.A.

Princeton, N. J.

## MICROSCOPY

Miss MARY A. BOOTH, F.R.M.S.

Springfield, Mass.

Rev. FREDERICK B. CARTER, M.A.

Montclair, N. J.

THOMAS TAYLOR, M.D.

Washington, D. C.

## MINERALOGY

FREDERICK A. CANFIELD, M.A., M.E.

Dover, N. J.

FRANK WIGGLESWORTH CLARK, B.Sc.

Washington, D. C.

J. FRANCIS WILLIAMS, Ph.D.

Worcester, Mass.

## MUSIC

GEORGE W. CHADWICK

Boston, Mass.

Prof. LOUIS C. ELSOM

Boston, Mass.

MAX FIEDLER

Berlin, Germany

ARTHUR FOOTE

Boston, Mass.

WILHELM GERICKE

Berlin, Germany

GILBERT H. PARKER

New Haven, Conn.

EMIL PAUR

Berlin, Germany

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\*Prof. ANDREW S. DRAPER, LL.D. Albany, N. J.

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Prof. BRADFORD P. RAYMOND, Ph.D., LL.D. Middletown, Conn.

Miss STELLA SKINNER New Paltz, N. Y.

Miss LUCY WHEELOCK Boston, Mass.

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Prof. KARL BUDDE, D.D. Strasburg University, Germany

JOHN BURROUGHS West Park, N. Y.

\*Deceased.

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Mrs. MARGARET DELAND	Boston, Mass.
EDWARD EMERSON, M.D.	Concord, Mass.
HAMLIN GARLAND	Chicago, Ill.
Rev. WASHINGTON GLADDEN, D.D.	Columbus, Ohio
Prof. MARY F. JORDAN, Ph.D.	Northampton, Mass.
Prof. GEORGE LYMAN KITTRIDGE, Ph.D.	Cambridge, Mass.
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Rev. J. F. NUGENT	Des Moines, Iowa
Prof. TRACY PECK, Ph.D.	Yale University
Prof. BERNADOTTE PERRIN, M.A.	Yale University
LÉLAND POWERS	Boston, Mass.
Prof. ROBERT W. ROGERS, Ph.D., D.D.	Madison, N. J.
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Prof. ANDREW F. WEST, M.A.	Princeton University
Prof. CALEB T. WINCHESTER, L.H.D.	Middletown, Conn.
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REV. GEORGE D. LATIMER	Salem, Mass.
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REV. FRANCIS G. PEABODY, D.D.	Cambridge, Mass.
PROF. WILLIAM Z. RIPLEY, Ph.D.	Cambridge, Mass.
HON. FRANK B. SANBORN	Concord, Mass.
PROF. SIDNEY SHERWOOD, Ph.D.	Johns Hopkins University
HON. WENDELL PHILLIPS STAFFORD	St. Johnsbury, Vt.
PROF. FRANK W. TAUSSIG, Ph.D.	Cambridge, Mass.
MISS ANNA B. THOMPSON	Wellesley College
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REV. THOMAS VAN NESS	Boston, Mass.
HON. JOSEPH H. WALKER	Worcester, Mass.
GRAHAM WALLAS, M.A.	Oxford, England
JOSEPH P. WARREN	Boston, Mass.
PRES. BOOKER T. WASHINGTON, Ph.D.	Tuskegee Normal College, Ala.
PROF. ARTHUR M. WHEELER, LL.D.	Yale University
PROF. MARY W. WHITNEY	Vassar College
HON. WOODROW WILSON, Ph.D., LL.D.	Washington, D. C.

### PSYCHOLOGY

PROF. GEORGE T. LADD, Ph.D., LL.D.	New Haven, Conn.
PROF. HUGO MÜNSTERBERG, Ph.D.	Harvard University

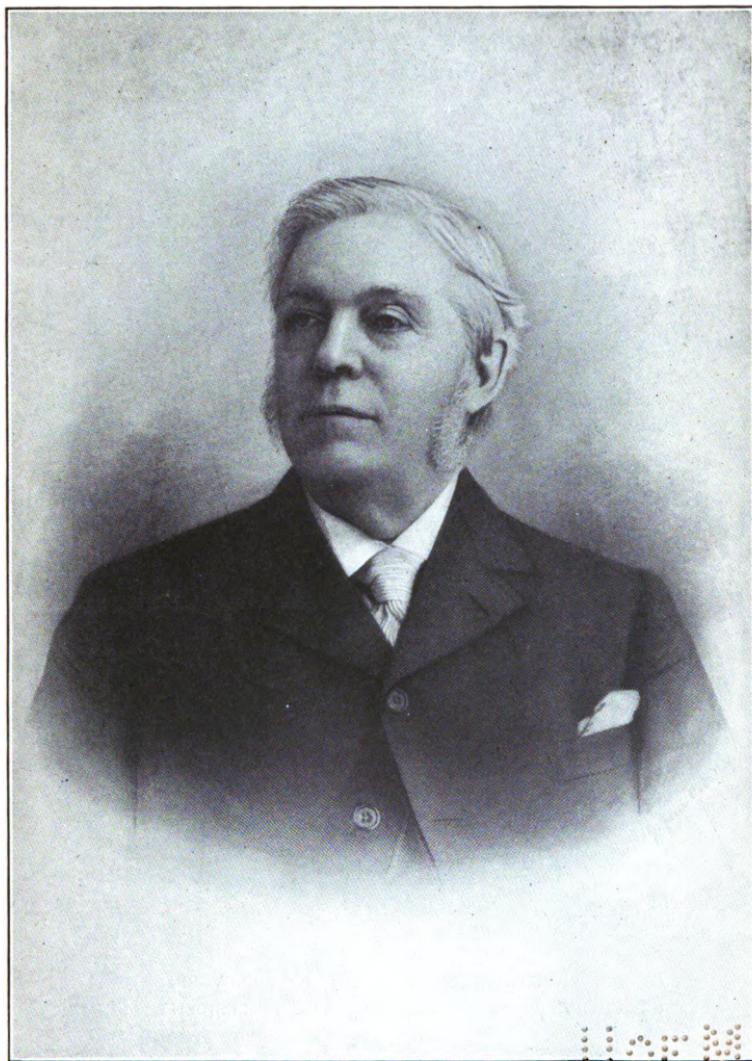
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JOHN BURROUGHS	West Park, N. Y.

Prof. HERBERT W. CONN, Ph.D.	Middletown, Conn.
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JOHN LYMAN FAXON	Boston, Mass.
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Pres. DAVID STARR JORDAN, LL.D.	Leland Stanford Junior University
C. HART MERRIAM, M.D.	Washington, D. C.
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Prof. WILLIAM T. SEDGWICK, Ph.D.	Boston, Mass.
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Prof. JOHN M. TYLER, M.A.	Amherst College
Prof. BURT G. WILDER, B.Sc., M.D.	Ithaca, N. Y.

#### SECTION ON PHILATELY

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GERMAN GREVE, Ph.D.	Santiago, Chili
M. H. LOMBARD	Boston, Mass.



**HENRY K. SHELDON, CHAIRMAN OF MUSIC COMMITTEE, 1890-1900.**



GENERAL JOHN BLACKBURNE WOODWARD,  
TRUSTEE, 1867-1896; SECRETARY, 1885-1887; PRESIDENT, 1887-1895.

1890

## IN MEMORIAM

### PERMANENT MEMBERSHIPS

A. AUGUSTUS LOW - - - - -	September 25, 1912
CARLL H. DE SILVER - - - - -	March 10, 1913

### LIFE MEMBERS

JULIA B. DE FOREST - - - - -	1911
CONSTANCE LOUISE PRAY - - - - -	June 29, 1912
Col. HENRY T. CHAPMAN - - - - -	September 8, "
WILLIAM N. PEAK - - - - -	November 3, "
WILLIAM EVERDELL - - - - -	November 5, "
JOHN R. PLANTEN - - - - -	December 8, "
Hon. STEPHEN V. WHITE - - - - -	January 18, 1913
Hon. GEORGE G. REYNOLDS - - - - -	January 22, "
Gen. STEWART L. WOODFORD - - - - -	February 14, "
DAVID H. HOUGHTALING - - - - -	February 17, "
AUGUST LEWIS - - - - -	March 2, "
LEANDER T. CHAMBERLAIN - - - - -	May 10, "
MARGUERITE STORRS VALENTINE - - - - -	.... "
THEODORE F. JACKSON - - - - -	June 18, "

### ASSOCIATE MEMBERS

EDWIN R. OLIN - - - - -	December 29, 1911
LEVI COOK - - - - -	.... "
WILLIAM M. HASTINGS - - - - -	February 21, 1912
Mrs. WM. F. MERRILL - - - - -	March ..., "
Mrs. THOMAS C. WARD - - - - -	March ..., "
THOMAS H. BARNARD - - - - -	March 8, "
CHARLES F. MEDD - - - - -	March 10, "
SIMEON F. SULLIVAN - - - - -	March 29, "
Mrs. CLARENCE R. CONGER - - - - -	March ..., "
Mrs. GEORGE L. PEASE - - - - -	May 31, "
Mrs. F. P. NICHOLS - - - - -	May ..., "
DAVID TALMAGE - - - - -	May ..., "
HENRY L. SMITH - - - - -	June 13, "
JOHN THATCHER - - - - -	June 18, "
Mrs. JULIA A. KEARSING - - - - -	July 5, "
Mrs JOHN H. BURTIS - - - - -	July ..., "

ELIZABETH M. PHILLIPS	-	-	-	-	-	-	July	...	"
Mrs. GEORGE W. BABB	-	-	-	-	-	-	July	22,	"
DANIEL M. SOMERS	-	-	-	-	-	-	August	28,	"
FRANK B. BEERS	-	-	-	-	-	-	September	1,	"
CHARLES D. COOK.	-	-	-	-	-	-	September	5,	"
Mrs. JOHN C. MOUNT	-	-	-	-	-	-	September	..,	"
ROBERT AVERY	-	-	-	-	-	-	October	1,	"
JOHN C. VAN CLEAF	-	-	-	-	-	-	October	..,	"
JAMES H. PITTINGER	-	-	-	-	-	-	October	11,	"
WILLIAM F. DUDLEY	-	-	-	-	-	-	October	22,	"
FRANCIS L. EAMES	-	-	-	-	-	-	November	10,	"
JAMES R. COWING	-	-	-	-	-	-	November	27,	"
Capt. JOHN McFARLANE	-	-	-	-	-	-	December	1,	"
RICHARD HYDE	-	-	-	-	-	-	December	14,	"
ARCHIBALD C. SHENSTONE	-	-	-	-	-	-	December	17,	"
Mrs. JAMES H. STEARNS	-	-	-	-	-	-	December	23,	"
Mrs. LYDIA A. EDWARDS	-	-	-	-	-	-	December	25,	"
HARRY F. TOWLE	-	-	-	-	-	-	December	31,	"
Admiral E. S. PRIME	-	-	-	-	-	-	—	..,	"
JOHN A. SANFORD	-	-	-	-	-	-	January	6, 1913	
AUGUST H. STOLTZE	-	-	-	-	-	-	January	9,	"
WILLIAM F. BURNS	-	-	-	-	-	-	February	5,	"
Mrs. SARAH E. OSTRANDER	-	-	-	-	-	-	February	..,	"
WILLIAM RUSSELL ROSS	-	-	-	-	-	-	March	2,	"
ANTHONY H. CREAGH	-	-	-	-	-	-	March	11,	"
ALGERNON T. BRISTOW	-	-	-	-	-	-	March	27,	"
WALTER S. BREWSTER	-	-	-	-	-	-	March	29,	"
Mrs. ADA V. LINDE	-	-	-	-	-	-	March	..,	"
Mrs. GEORGE C. BENNETT	-	-	-	-	-	-	April	1,	"
FRANK LITTLE, M.D.	-	-	-	-	-	-	April	4,	"
GEORGE W. BAILEY	-	-	-	-	-	-	April	23,	"
MATHILDA McLEAN	-	-	-	-	-	-	May	21,	"

# A BRIEF HISTORY OF The Brooklyn Institute of Arts and Sciences

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In the summer of 1823 several gentlemen, among whom was AUGUSTUS GRAHAM, met at Stevenson's Tavern for the purpose of establishing for the apprentices of Brooklyn a Free Library. They adopted a constitution, and issued to the citizens of Brooklyn a circular, in which they solicited donations of books and money with which to effect their purpose. On November 20, 1824, they were incorporated by the Legislature of the State under the name of The Brooklyn Apprentices' Library Association, and on July 4, 1825, the cornerstone of the first building owned by the Association was laid by General LAFAYETTE, at the junction of Henry and Cranberry Streets. As early as 1835 the Association had outgrown its original quarters, and, the property having been sold to the city, the Institution was removed to its new building in Washington Street, then the residential center of the young city of Brooklyn.

In order to broaden the scope of the Association, an amended charter was granted by the Legislature in 1843 and the name therein changed to that of the Brooklyn Institute. For many years thereafter the Institute was a most important factor in the social, literary, scientific and educational life of Brooklyn. Its library had a good circulation; its public hall was the scene of many historic and social gatherings; and from its platform were heard such eminent scientific men as Agassiz, Dana, Gray, Henry, Morse, Mitchell, Torrey, Guyot and Cooke; such learned

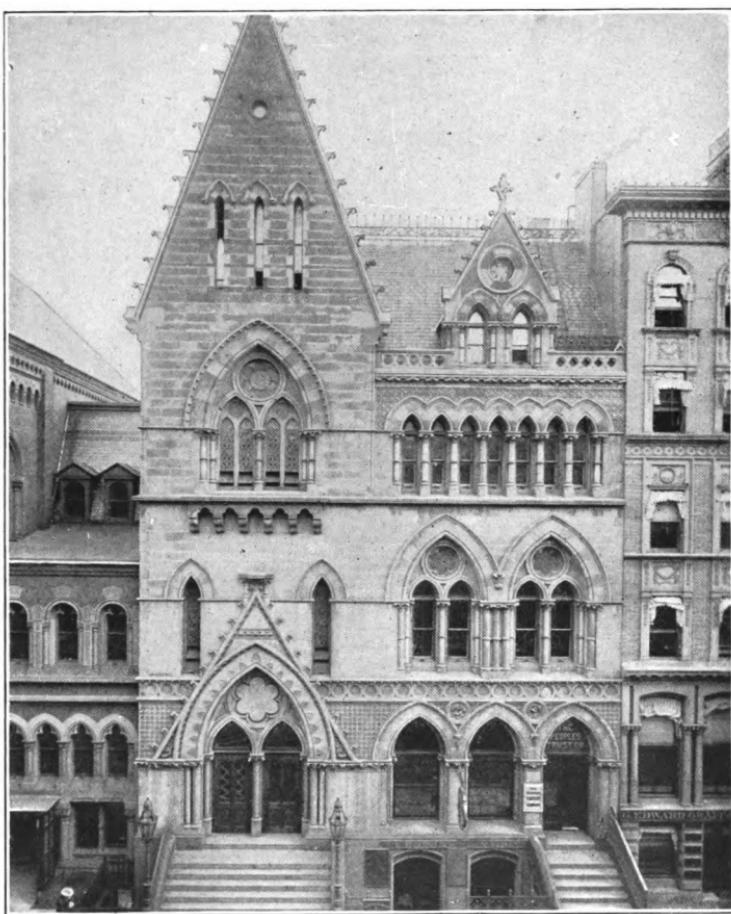
divines as Doctors McCosh, Hitchcock, Storrs and Buntington; and such defenders of the liberties of the people as Phillips, Sumner, Garrison, Emerson, Everett, Curtis, King, Bellows, Chapin and Beecher.

During this brilliant period of its history (1843-1867) the Institute received from Mr. GRAHAM two very important donations. On July 4, 1848, he freed the Washington Street building from all encumbrance, and by his will, which was made known to the Board of Directors on November 28, 1851, shortly after his decease, the Institute received the sum of \$27,000 as a permanent endowment fund. The will directs that the interest of \$10,000 of this sum shall be used in the support of lectures on scientific subjects and in the purchase of apparatus and collections illustrating the sciences; that the interest of \$12,000 shall be used in the support of Sunday evening lectures on "The Power, Wisdom and Goodness of God as Manifested in His Works;" and that the balance of \$5,000 shall be used in the support of a School of Design and in forming a Gallery of Fine Arts.

For several years, however, prior to 1867, owing to the erection of the Academy of Music and other public buildings, the Institute building was regarded as behind the times. The income from the rental of portions of the building was dwindling to a low figure, and the financial support of the free library was becoming inadequate. Under these circumstances the Directors remodeled the building in 1867, at an expense of about \$30,000, a part of which was raised by Life Membership Subscriptions of \$50 and \$100, and the balance by a mortgage on the building. For twenty years (1867-1887) this indebtedness necessitated the application of a portion of the income from the rent of the building and from the Graham Endowment Fund to the payment of the interest



THE GRAND FOYER,  
BROOKLYN ACADEMY OF MUSIC.



THE ART BUILDING, 172-174 MONTAGUE STREET.

and the principal of the debt. Final payment on the mortgage was made in 1887.

The cause of the partial inactivity of the Institute during the twenty years (1867-1887) is, therefore apparent. The most that it was able to do was to circulate its library, to keep up its classes in drawing and to provide for the annual addresses on the 22d of February. Freed from debt in 1887 the Institute was enabled once more to use the whole income from its funds and building for educational purposes, and to become once more an important agent in the work of education in the city.

The property of the Institute in 1887 consisted of the Institute building and land, valued at \$80,000, a library of 12,000 volumes, a collection of paintings valued at \$10,000 and Endowment Funds of \$46,000. These last comprised the \$27,000 bequeathed by Mr. GRAHAM, the WILLIAM H. CARY Fund of \$10,000 used in the support of the library and an increment of \$9,000 realized through premiums on the sale of bonds.

#### 1887-1888

During the year 1887-1888 a new era in the history of the Institute was inaugurated. The Board of Trustees determined on February 11, 1888 to make the property of the Institute the nucleus of a broad and comprehensive institution for the advancement of science and art, and its membership a large and active association laboring, not only for the advancement of knowledge, but also for the education of the people, through lectures and collections in the arts and sciences. It was observed that, while Boston had the Lowell Institute, a Society of Natural History and an Art Museum; while Philadelphia had the Franklin Institute, an Academy of Sciences and a Gallery of Fine Arts; and New York had the Metropolitan Museum and the

American Museum, Brooklyn had nothing corresponding to these institutions. It was felt that Brooklyn should have an Institute of Arts and Sciences worthy of her wealth, her position, her culture and her people; that it was her duty to do more than she was then doing for the education and enjoyment of her people, and that some step should be taken looking toward the future growth and needs of the city in matters of art and science.

Accordingly, there was adopted a form of organization which contemplated the creation of a large association of members, and a continual increase of the Endowment Funds and Collections of the Institute. Provision was made for a subdivision of the membership into departments, representing various branches of Art and Science, each department forming a society by itself and yet enjoying all the privileges of the general association. A general invitation was extended to citizens specially interested in Science and Art to become members of the Institute. Courses of lectures on Science and Art were provided. The Director's Room of the Institute was enlarged to accommodate the meetings of some of the departments contemplated, and a large Lecture Room on the third floor of the Institute building was fitted up at an expense of \$2,600 for the occupancy of these departments that would make use of apparatus and collections at their meetings.

#### 1888-1889

During the first fifteen months after the reorganization of the Institute a membership of three hundred and fifty persons was recorded. The Brooklyn Microscopical Society joined the Institute in a body with sixty-four members, and became the Department of Microscopy. The American Astronomical Society, whose members resided mostly in New York and Brooklyn, became the Department of Astronomy, with thirty-two members. The Brooklyn Entomological Society united with the Institute and

became the Entomological Department, with thirty-five members. The Linden Camera Club of Brooklyn became the Department of Photography, with thirty-four members. Departments of Physics, Chemistry, Botany, Mineralogy, Geology, Zoölogy and Archæology were successively formed. Each of the above twelve departments began to hold monthly meetings. The permanent funds and property of the Institute were increased by \$3,000. Additions were made to the Library, its circulation was increased from 12,000 to 36,000 volumes per year and a general citizens' movement to secure a Museum of Arts and Sciences for Brooklyn was inaugurated.

#### 1889-1890

The progress of the Institute during the year 1889-1890 was even greater than in the preceding fifteen months. The membership of the twelve departments organized the previous year was somewhat more than doubled. Eight new and strong departments were formed successively; viz., Architecture, Electricity, Geography, Mathematics, Painting, Philology, Political Science and Psychology. The membership was increased from 350 to 1,100. To the collections of the Institute were made very large additions. The Library was reorganized and its circulation increased from the rate of 36,000 to 55,000 volumes per year, and 1,500 new books were placed in the Library for the benefit of the departments and their members. The number of lectures, exhibits and meetings of departments was increased from about 90 in the previous year to 230. The attendance on the department meetings was doubled, and amounted to 46,950. The number of members taking an active part in the meetings and in the work of the Institute was quadrupled. The quality of the lectures and addresses was an improvement over that of the previous year; and out of the abundance

of active and increasing interest in the Arts and Sciences awakened by the old Brooklyn Institute the new **BROOKLYN INSTITUTE OF ARTS AND SCIENCES** was born, destined to absorb the old Institute, to command the attention, the admiration, the love and support of every resident of the city, to foster the interests of other educational institutions and to become a means for the education, the refinement and the uplifting of all.

#### 1890-1891

The growth of the Institute received a temporary check during the year 1890-1891. On September 12 a serious fire rendered the Institute Building unfit for immediate use. But through the generous hospitality of other institutions in the city it was possible to carry on the work elsewhere. The Young Men's Christian Association, the Union for Christian Work, the Packer Collegiate Institute, the Brooklyn Library, the Polytechnic Institute, the Brooklyn Heights Seminary, the Church of the Saviour, the Adelphi Academy and the Brooklyn Art Association each contributed the use of rooms for the lectures and the work of the departments. And notwithstanding the fact that the work was distributed at various points, the Institute's progress was of a permanent and substantial character. 312 new members were added. The membership of each of the twenty departments was enlarged. The number of lectures and meetings was increased to 310, as against 230 in the previous year. The attendance on the lectures was augmented, reaching a total of 99,200. The Geographical Department brought together a collection of geographical appliances consisting of maps, globes, charts, reliefs, models, atlases, treatises, text-books and other publications, valued at \$6,000. The Geographical Collection was exhibited in Brooklyn for four weeks and in Boston for three weeks. The Boston Exhibition was

visited by about 16,000 people and the Brooklyn Exhibition by upwards of 27,000 people. Subscriptions toward the Endowment Fund were made to the amount of \$51,500 and by act of legislation the city was authorized to expend \$300,000 in the erection of a portion of the proposed Museum of Arts and Sciences on Prospect Heights.

#### 1891-1892

During the fourth year of active work after the re-organization of the Institute 632 new members were recorded, of whom about one-third were teachers in our public and private schools. The Architectural Department established a school for junior architects and draughtsmen. The Department of Painting aided in the establishment of an Art School. The Department of Geography exhibited its collection in New York City for four weeks for the benefit of the teachers and citizens of New York and vicinity. The Department of Music was established during the autumn by members of the musical profession, with a membership of 117. The Department of Pedagogy was organized in March with 206 members from the teaching profession. The Photographic Department was provided with an excellent suite of rooms fitted up at an expense of about \$1,000. Two Summer Schools of Art were established, one of them at the seashore and the other in the mountains. The Departments of Architecture, Microscopy and Photography gave large and excellent exhibitions that were free to the public. The number of lectures and meetings by the departments was increased from 310 in the previous year to 405. The total attendance on the lectures, meetings and exhibitions was increased from 99,200 to 120,500. Subscriptions to the Endowment Fund were received amounting to \$16,000. The real estate belonging to the old Brooklyn Institute in Washington Street was sold

to the Trustees of the New York and Brooklyn Bridge, and the net proceeds of the sale, amounting to \$72,000 were invested in city bonds. The old Brooklyn Institute was consolidated with the new Brooklyn Institute of Arts and Sciences, transferring thereto its property and estate, amounting to \$139,286 in invested funds, together with collections, library and other property valued at \$42,450. The Mayor and Park Commissioner selected as the site for the proposed Museum Buildings the East Side lands, bounded by Eastern Parkway, Washington Avenue, the south side of old President Street and the Prospect Hill Reservoir.

### 1892-1893

During the fifth year the growth of the educational work of the Institute was greater than that of any preceding season. 940 new members were added to the roll. The number of lectures, addresses, concerts and exhibitions open to all the members was 482, as against 405 the previous year. The number of lectures and class exercises open to members and others by the payment of a moderate fee was 1,397, as against 1,134 the previous year; the number of concerts was increased from eight to fifteen. The average daily attendance on the exercises of the Institute for the eight months of active work was 936, and the total attendance for the year 190,900. The annual income was increased from \$18,943.20 in the previous year to \$31,641.51. Institute extension courses of lectures were given in the eastern section of the city. The School of Political Science was established with four classes and ninety-six pupils. The Art School was transferred to new and larger quarters in the Ovington Studio Building, and the number of pupils was increased from 94 to 128. The Department of Architecture, acting through its Advisory Board, devised a scheme of competition for

the best plan and design for the proposed Museum of Arts and Sciences which was approved by the Board of Trustees and adopted by the Mayor and Park Commissioner; and a competition for the best plan and design for a Museum Building was completed with most satisfactory results.

### 1893-1894

During the sixth year of educational work under the new constitution 979 new members were enrolled. The total number of members was increased from 2,622 to 3,457. The total number of lectures, conferences, class exercises and Department meetings was increased from 1,879 to 2,212. The Department of Domestic Science was organized with a membership of forty-two. The annual income was increased from \$31,641.51 in 1892-1893 to \$40,169.35. The average daily attendance on the exercises of the Institute was 1,177. The Mayor and Park Commissioner leased to the Institute eleven and nine-tenths acres of land for a period of one hundred years, at one dollar per year, as a site for the Museum Building. The Legislature of the State of New York authorized the expenditure of \$50,000 in grading the Institute Park lands, including the Museum site. The Department of Parks of the City of Brooklyn leased to the Institute at a nominal rental the Bedford Park Building for temporary museum purposes. The Departments of Geography, Zoölogy, Botany, Geology, Mineralogy and Chemistry arranged their collections in the Bedford Park Building for public exhibition. The State Legislature increased the rate of interest on the Museum of Art and Science Bonds to not exceeding four per cent. to enable the city to sell the bonds and to erect the first section of the Museum Building.

## 1894-1895

During the seventh year of work under the new constitution, the growth in the annual income and in the attendance on the meetings of the Institute was in a measure checked by the general financial depression under which the country suffered, and also by the serious interruption of public travel caused by the strikes on the surface railways of the city. The number of members, however, was increased from 3,457 to 3,764. The total number of lectures, conferences, class exercises and Department meetings was 2,621 as against 2,212 in the previous year. The Department of Law was organized with a membership of 123. The Department of Entomology was reorganized with an increased membership. The annual receipts increased from \$40,169.35 to \$44,756.13. The Temporary Museum Building in Bedford Park was opened to the public on Thursday and Saturday afternoons. A fund of \$1,500 was raised to aid Professor WILLIAM H. GOODYEAR in making a series of surveys and photographs of Mediæval Architecture in Italy. The site of the Brooklyn Museum of Arts and Sciences was surveyed and the elevation of the base line of the building fixed at 175 feet above sea level. The working plans and specifications for the northern portions of the Museum were completed and the Museum Commission of the city advertised for contracts for the erection of the northwest section of the Museum Building.

## 1895-1896

The year 1895-1896 was one of the most eventful in the history of the Institute. The site for the Museum Building was graded during the months of September and October. The contract for the erection of the northwest section of the Museum Building was given by the Mayor and Park Commissioner on September 1 to Messrs. P. J.

CARLIN & Co. for \$254,675. Ground was broken with appropriate ceremonies by the Hon. FRANK SQUIER, Park Commissioner, for the foundation of the building, on September 14. The cornerstone of the structure was laid by Mayor CHARLES A. SCHIEREN on December 14, in the presence of a large gathering of citizens, and the construction was carried to the third floor of the building. The educational work was characterized by an increase in the attendance from 215,150 to 268,580. The number of lectures, class exercises and other educational gatherings was increased from 2,621 to 3,069. The net increase in the membership was from 3,764 to 4,168. The Department of Music gave a series of Philharmonic Concerts in conjunction with the Brooklyn Philharmonic Society by the Boston Symphony Orchestra. The receipts applicable to the payment of running expenses were increased from \$44,756.13 to \$66,199.73. The Endowment Fund received from the estate of the late JOSEPH T. PERKINS the sum of \$10,000. The Institute became the owner of a majority of the stock of the Brooklyn Art Association. The Herbarium and Botanical Collections of the late Reverend CHARLES H. HALL, D.D., LL.D., were presented to the Department of Botany by Mrs. HALL in accordance with the request of Dr. HALL; and the State Legislature authorized the continuance of work on the Museum Building at an expense not exceeding \$600,000.

Accompanying this growth the Institute suffered losses by the death of an unusually large number of valuable members. The Reverend CHARLES H. HALL, D.D., LL.D., for seven years President of the Associate Members and six years a member of the Board of Trustees, died on September 12, 1895. General JOHN B. WOODWARD, a member of the Board of Trustees for twenty-seven years, Secretary of the Board of Trustees for four years and President of the Board of Trustees from 1888 to 1895 in-

clusive, died on March 5, 1896. JOHN D. JONES, the founder of the Biological Laboratory at Cold Spring Harbor and a generous contributor to its resources, died September 20, 1895, and JOSEPH T. PERKINS, a Patron of the Institute, died on July 12, 1895.

#### 1896-1897

The year 1896-1897 witnessed an increase in the membership from 4,168 to 4,704, in the attendance from 268,580 to 302,426, in the number of lectures, conferences, concerts, readings and class exercises from 3,069 to 3,416, and in receipts from \$66,199.73 to \$67,983.85. The State Legislature passed a law providing \$10,000 for the care and maintenance of the Museum Building during the year 1897; included in the Charter of Greater New York were provisions for the continuance of all laws affecting the Institute unimpaired, and for the care and maintenance of the Museum Building and its contents, an annual appropriation by the City of New York of a sum not less than \$20,000; and authorized the establishment of a Botanic Garden and Arboretum on the Park Lands south of the Museum site as a proper approach to the Museum Building. The first section of the Museum Building was completed on May 14, 1897. A very valuable loan collection of paintings and other works of art, comprising some six hundred titles, was placed in the galleries on the first and third floors during the latter part of May, and the entire Museum was thrown open to the public on Wednesday, June 2, to remain open daily for the benefit of all.

#### 1897-1898

During the tenth season, after the reorganization of the Institute effected in 1887-1888, the Museum Building was equipped with engines, dynamos, electric ventilating fan, electric elevator, electric lights, natural history cases, furni-

ture and fixtures, making the entire cost of the building and equipment \$335,500. The Museum Building was dedicated with appropriate exercises on October 2. The Loan Collection of Paintings and other works of Art installed in May was kept on exhibition until November 1. A second loan collection of paintings was installed in November, numbering 421 canvases, and this collection, together with the paintings belonging to the Institute, continued on exhibition in the galleries on the third floor of the Museum. Portions of the Scientific Collections of the Institute in Mineralogy, Geology, Zoölogy, Botany, Entomology, Geography and Ethnology were transferred from the Bedford Park building to the new Museum and installed in the galleries of the basement and second floors. Loan collections in Mineralogy, Paleontology, Entomology, Archæology and Ethnology were placed on exhibition from time to time in the galleries of the basement and second floors. Very valuable works of art were presented by A. AUGUSTUS HEALY, JAMES A. H. BELL, ABRAHAM ABRAHAM, JOSEPH JEFFERSON, E. K. AUSTIN, FREDERICK J. ADLER, C. F. BROOKS, SAMUEL P. AVERY, Mrs. SAMUEL BOWNE DURYEA, Colonel ROBERT B. WOODWARD, PETER LAUCKHARDT, the REMBRANDT CLUB and the estate of the late JOHN H. PRENTICE. Eighty-five selected casts from Greek and Roman Sculptures were presented by Members and friends of the Institute and installed in the Hall of Greek Sculpture on the first floor of the Museum. FRANK S. JONES presented the Institute with \$3,500 with which to purchase the GEBHARD GEOLOGICAL COLLECTION, representing the Paleontology of the State of New York. Subscriptions were made amounting to \$3,000 by HENRY H. BENEDICT, JAMES H. BATES, FRANK SHERMAN BENSON, Mrs. ARTHUR W. BENSON, Miss MARY BENSON, Hon. WILLIAM B. DAVENPORT, Hon. CHARLES A. SCHIEREN, Hon. TIMOTHY L. WOODRUFF, CHARLES B. HEWITT, HENRY K. DYER,

MARTIN JOOST and ALVAN R. JOHNSON, with which to purchase the WILLIAM WALLACE TOOKER COLLECTION of Indian Relics of Long Island and the Collection was purchased and installed in the Museum. JAMES A. H. BELL presented collections of paintings, sculptures and other works of art, a library of music, and collections in mineralogy and conchology. Very valuable additions were made to the Collections in Ornithology by A. B. LOUNSBERRY, ROBERT W. PEAVEY, Mrs. A. M. MATHESON, Mrs. N. L. TERRELL and others; to the Collections in Mineralogy by ALEXANDER M. WHITE, FRANKLIN W. HOOPER, GEORGE L. ENGLISH, JOHN W. FRECKELTON, JAMES WALKER, Miss J. HUSSON and others; to the Herbarium by JOHN COOPER, M.D., LUCIUS BELL and NATHANIEL L. BRITTON, Ph.D.; to the Archaeological Collection a series of Egyptian jars by Mrs. MARY L. BEERS.

The Library received additions numbering 1,048 volumes and many pamphlets. Fourteen shares of stock in the Brooklyn Art Association were presented in exchange for Life Membership Certificates in the Institute. Four courses of lectures were given in the Eastern District of Brooklyn. The Membership was increased from 4,704 to 5,417. The attendance on lectures, classes, concerts, readings and meetings of departments was 334,670. The registered attendance at the new Museum Building was 126,046. The total attendance for the year reached 460,716. The annual income grew from \$67,983.85 to \$99,058.20. The City of Brooklyn appropriated \$10,000 to meet the expense of the care and maintenance of the Museum during the period, June 1 to December 31, 1897. The City of New York set apart \$20,000 for the care and maintenance of the Museum during the year 1898 and the Department of Parks of the City of New York graded portions of the Museum grounds lying south of the Museum Building.

## 1898-1899

During the educational year 1898-1899 the membership was increased from 5,417 to 5,975; the number of lectures open to all members on the presentation of the weekly membership ticket, from 544 to 572; the total number of meetings and class exercises, from 3,558 to 3,806; the attendance on lectures, concerts, dramatic readings and class exercises, from 334,670 to 360,980. The attendance at the Museum Building was 92,736, and the total attendance for the year 453,716. The annual income of the Institute, applicable to the payment of current expenditures, was increased from \$99,058.20 to \$119,965.12. FRANK S. JONES, Member of the Board of Trustees, presented to the Institute \$10,000 to be used in the purchase of the BERTHOLD NEUMOEGEN COLLECTION OF LEPIDOPTERA, numbering some 40,000 specimens. EDWARD L. GRAEF, Curator of Entomology, presented to the Institute his entire Collection in Lepidoptera, numbering some 15,000 specimens. A., AUGUSTUS HEALY, President of the Board of Trustees, presented a colored Majolica Lunette by GIOVANNI DELLA ROBBIA, entitled "The Resurrection of Christ." WILLIAM T. EVANS presented a Portrait of WILLIAM CULLEN BRYANT by the late WYATT EATON. A large number of donations was made to the scientific and art collections, descriptions of which appear in the eleventh Year Book (1898-1899), under the respective Departments to which the gifts naturally belong. To the scientific collections were added, by purchase thirty compound microscopes and two microtomes for the Department of Microscopy, at an expense of \$1,124.50; apparatus for the Department of Physics at an expense of \$520; apparatus for the Department of Archæology costing \$560; apparatus for the Department of Geography and Geology costing \$960. On the recommendation of the Council of the Institute the Trustees determined to estab-

lish a CHILDREN'S MUSEUM in the Bedford Park Building. Apparatus and collections for the equipment of this Museum were ordered at an expense of \$2,600. The SCHOOL OF PEDAGOGY was established with five classes and an enrollment of 522 students. Application was made by the Board of Trustees to the authorities of the City of New York for the issuing of bonds as authorized by law for the continuation of the work of construction on the Museum Building. This application was approved by the Department of Buildings, Lighting and Supplies, and was laid before the Board of Estimate and Apportionment of the City of New York in June, 1899.

#### 1899-1900

During this year the membership was increased from 5,975 to 6,391; the total number of lectures, class exercises, concerts, readings and Department meetings from 3,806 to 4,057; the attendance, exclusive of the Museums, from 360,980 to 390,225; the attendance at the Central Museum from 92,736 to 101,261; the attendance at the Children's Museum was 28,261, and the total attendance for the year was increased from 453,716 to 519,747. The annual income available for carrying on the educational work was increased from \$119,965.12 to \$147,096.65. The Endowment Fund was increased by \$15,000, received from the estate of the late JOSEPH C. HOAGLAND, for ten years a Member of the Board of Trustees. This year was also distinguished by the organization of the Department of Philosophy; by the establishment and opening (on December 16, 1899) of the Children's Museum, and by the development of the Museum work. Professor WILLIAM H. GOODYEAR, M.A., was appointed on full time as Curator of Fine Arts; Professor R. ELLSWORTH CALL, M.D., Ph.D., as Curator of the Children's Museum; GEORGE K. CHERRIE, as Curator of Ornithology; ALFRED

G. MAYER, D.Sc., as Curator of Natural Science; ABEL J. GROUT, Ph.D., as Curator of Botany; Professor JOHN S. MCKAY, as Curator of the Collections in the Physical Sciences; Miss SUSAN A. HUTCHINSON, as Librarian of the Department of Libraries, and Miss MIRIAM S. DRAPER, as Librarian of the Children's Museum Library. The Scientific and Art Collections received many additions, described under the several Departments in the twelfth Year Book (1899-1900). Notable among these are a portrait of General JOHN B. WOODWARD, painted by FEDOR ENCKE, Presented by Colonel ROBERT B. WOODWARD; a landscape entitled "On the Plains of Hungary," painted by OTTO DE THOREN and presented by JOHN B. LADD; a marble bust, entitled "The Madonna," WILLIAM ORDWAY PARTRIDGE, sculpture, presented by GEORGE FOSTER PEABODY, and a landscape by GEORGE H. BOGERT, presented by GEORGE A. HEARN. During this year the Institute purchased from JAMES J. TISSOT, of Paris, his collection of 461 paintings and drawings, illustrating the Life of Christ, for the sum of \$60,000, and raised by subscription \$53,000 towards the purchase price. Also during this year the city government authorized the issue of the corporate stock of the city to the amount of \$300,000, the proceeds of the sale of which funds were made available for the erection of the masonry, brick and iron work of the second section of the Museum Building. The contract for the work was let in May for \$296,000, and ground was broken on June 6 with appropriate exercises.

#### 1900-1901

During the twelfth year after the reorganization of the Institute the membership was increased from 6,391 to 6,836; the attendance at the Children's Museum was 79,756; at the Central Museum 110,634, and at the lec-

tures, concerts, readings, courses of instruction, exhibitions, etc., 351,736; the total attendance for the year was 542,126. The total income was increased from \$147,096.65 to \$197,844.33. The subscriptions to the fund for the purchase of the TISSOT COLLECTION OF PAINTINGS ILLUSTRATING THE LIFE OF CHRIST was increased from \$53,000 to \$60,000; the paintings were paid for by the Institute in January; two galleries on the third floor of the Museum were provided with screens and redecorated to receive the paintings; the entire collection was reframed at an expense of about \$4,000 and the pictures were hung for permanent public exhibition in May. The Institute received an unusually large number of gifts during the year; the most notable of those added to the art collections were as follows: from Colonel ROBERT B. WOODWARD, 490 pieces of ancient Syrian and Egyptian glass; from A. AUGUSTUS HEALY and FRANK HEALY, an oil painting by LOUIS GALLAIT, entitled "The Last Honors to Counts Egmont and Horn;" from WILLIAM A. PUTNAM, an oil painting by BEN FOSTER, entitled "A Misty Moonlight Night;" from GEORGE A. HEARN, an oil painting entitled "Dordrecht," by GEORGE H. BOGERT; from Hon. CARLL H. DE SILVER, 18 pieces of Japanese ceramic art and an old painting entitled "A Landscape," by HENRY P. SMITH; from Mrs. THEODORE JACOBY, a Wagner alto viola; from L. W. LAWRENCE, a bronze replica of the "Flying Mercury," by GIOVANNI DE BOLOGNA; from A. E. OVERTON, a pair of Japanese Satsuma Vases; from BENJAMIN T. FROTHINGHAM, 209 mounted photographs from negatives taken by Dr. SCHLIEMANN at Troja, Mycenae and Tiryns; and from eleven of the Trustees a portrait of WILLIAM CULLEN BRYANT by DANIEL HUNTINGTON. To the scientific collection gifts were made during the year of 19,429 specimens; among the larger of these gifts were the following: From WILLIAM LINCOLN CHAPEL,

3,147 birds' eggs, nests and skins; from Mrs. JOHN H. BURTIS, 2,500 shells, together with a collection of corals and ethnological specimens; from Mrs. GEORGE D. HULST, about 12,000 plants from the collection of the late Reverend GEORGE D. HULST, Ph.D.; from Hon. EUGENE G. BLACKFORD, 145 specimens of fossil fishes and nearly an equal number of specimens of living species; from the Hon. CHARLES A. SCHIEREN, 117 pieces of Cliff Dwellers' pottery and relics; from CHARLES HOWARD REMINGTON, 440 birds' eggs, also several fossils and Indian relics; from Mrs. ANNIE MORRILL SMITH, 167 plants; from THE H. W. JOHNS MANUFACTURING COMPANY, 77 specimens of asbestos, native and manufactured; from Dr. ABEL J. GROUT, 150 plants; from JACOB DOLL, 297 insects and vertebrates; from ROBERT W. PEAVEY, 22 mounted birds; from Mrs. J. P. GERAN, 18 mounted birds; from GEORGE K. CHERRIE, 10 birds and mammals. The Museum received an unusually large number of valuable loans to its art collections; from A. AUGUSTUS HEALY, 30 paintings; from Colonel ROBERT B. WOODWARD, 18 paintings; from HENRY H. BENEDICT, 3 paintings; from J. WILLIAM BROWN, 2 paintings; from Colonel HENRY T. CHAPMAN, 3 paintings; from Mrs. CHARLES R. BAKER, 5 paintings; from JOHN S. JAMES, 4 paintings; from CHARLES HOWARD REMINGTON, 12 paintings; from Mrs. ANNA STEWART GOODWIN, Mrs. CORNELIA K. HOOD, the Hon. FRANK SQUIER and RUSSELL STURGIS, 2d, 1 painting each; from the ARION SINGING SOCIETY, the Emperor's Prize of Honor; from FRANCIS LE BARON, 9 of the original bronzes by JOHN ROGERS; from CLAYTON L. MOAK, a Japanese art collection; from A. A. HOPKINS, a collection of Italian photographs. The Museum acquired by purchase, collection and exchange, 1,754 additions to its scientific collections, and a large collection of electrotype reproductions of the British Museum collec-

tion of Greek coins. The Mastodon skeleton presented to the Institute in 1889 was mounted in the Museum Building; the Department of Libraries at the Central Museum and the Children's Museum Library in Bedford Park were organized and made available for use by the public; four new rooms were fitted up for exhibition purposes in the Children's Museum, and Volume I, No. 1, of the *Science Bulletin* of the Museum was published. The City of New York appropriated for the maintenance of the Institute Museums for the year 1901, \$55,000. The work of construction of the second section of the Museum Building was in progress throughout the year and the masonry was carried up to the base of the dome previous to July 1. The plans and specifications for the completion of the second section were made by the architects. Application to the Park Commissioner of Brooklyn and Queens, the Hon. GEORGE V. BROWER, for the issue of bonds to provide for the continuance of work on the Museum Building was made by the authority of the Trustees and Council, and the Park Commissioner made requisition on the Board of Estimate and Apportionment of the City of New York for the issue of bonds to the amount of \$300,000, by the sale of which provision may be made for the continuance of the work of Museum construction.

#### 1901-1902

During the year 1901-1902, the membership was increased from 6,836 to 7,215; the attendance at the Children's Museum was 84,487; at the Central Museum 113,955; at the lectures, concerts, readings, class exercises, exhibitions, etc., 254,361; and the total attendance for the year was 452,803. The total annual income \$146,077.52. The additions to the Scientific Collections of the Museum numbered 25,007, among the more important of which was a collection of Marine invertebrates from Japan, pre-

sented by the Hon. EUGENE G. BLACKFORD; a collection representing the Marine life of the North Atlantic coast, made by ALFRED G. MAYER, D.Sc.; the S. E. STILES COLLECTION OF MICROSCOPICAL APPARATUS AND PREPARATIONS; a large collection of Mosses presented by Mrs. ANNIE MORRILL SMITH; a collection of 4,000 specimens of Lepidoptera, presented by CHARLES S. McKNIGHT, M.D.; a collection of surveys, maps and pictures of Peru, presented by the Hon. FRANK SQUIER, and a collection of 116 pieces of pottery from the Cliff Dwellings and Pueblos of Arizona and New Mexico, presented by the Hon. CHARLES A. SCHIEREN. The gifts in the Department of Fine Arts include additions to the collection of ancient oriental glass, made by Colonel ROBERT B. WOODWARD; several Japanese ceramics and small swords, and a large Chinese bowl, presented by Hon. CARLL H. DE SILVER; a painting entitled "Strandgut," painted by ADOLPH HERING, and presented by HENRY BATTERMAN; and two paintings of unusual value presented by A. AUGUSTUS HEALY, entitled "Meditation," by G. BELLONI, and "The Apple Orchard," by DAUBIGNY; \$500 was contributed by ABRAHAM ABRAHAM to support courses of lectures on the Fine Arts; \$500 by GEORGE A. HEARN, to be used in purchasing photographs of Italian art; \$1,250 was subscribed to a fund for explorations in the Southwest, and \$1,150 for the purchase of the RIGGS COLLECTION OF ANCIENT PUEBLO POTTERY. The largest gift ever received by the Institute from a single citizen was the addition to the permanent endowment of \$50,000, presented by Colonel ROBERT B. WOODWARD, and to be known as the Woodward Memorial Funds, \$25,000 of which is a fund in memory of the late JOHN B. WOODWARD, and the balance of \$25,000 is a fund in memory of ELLA C. WOODWARD,—the interest of these two funds to be used in the purchase of works of art for the Museum. The City of New York

issued in December, 1901, corporate stock to the amount of \$300,000, the proceeds of the sale of which to be used in completing the interior of the Central Section of the Museum, and appropriated for the annual support and maintenance of the Institute Museums the sum of \$60,000. The exterior of the Central Museum Section was completed during the year, and the Department of Parks awarded in June, 1902, the contract for the interior work at \$274,500. The Board of Estimate and Apportionment authorized the issue of corporate stock of the city to the amount of \$150,000 to provide a Power House and Power Plant, together with fixtures and decorations for the Central Section of the Museum.

#### 1902-1903

During this educational year, the attendance at the Children's Museum was 110,834; at the Central Museum, 109,395; at the lectures, concerts, class exercises, exhibitions, etc., 255,757; the total attendance for the year was 475,986. The total income was \$159,958.09. The Endowment Funds were increased by the sum of \$16,400, through a gift of \$10,000 by FREDERICK LOESER, the interest of which is to be expended annually in the purchase for the Museum of photographs of paintings and other works of art, plaster casts of important sculptures, and, in case the Museum is well supplied with these, of original works of art; and also through a bequest made by the late JAMES A. H. BELL, the amount of which so far received is \$6,400.

The additions to the scientific collections numbered 13,480, and among the more important of these was a collection of marine animals from the North Atlantic Coast, made during an expedition in the summer of 1902 by Dr. ALFRED G. MAYER; some 150 mammals, birds and reptiles from the New York Zoological Garden; some 50 birds from the

Rockaway Rod and Gun Club; three very valuable skins of mammals from Mrs. WILLIAM B. DAVENPORT, and a large collection of fossils from New York State, made by FREDERICK BRAUN. The additions to the art collections included six very valuable paintings from the estate of the late HENRY W. MAXWELL; an oil painting entitled "A Gray Morning," by LEONARD OCHTMAN, purchased with the income of the Woodward Memorial Funds; extensive collections of Japanese and Chinese works of art presented by Colonel ROBERT B. WOODWARD, GEORGE C. BRACKETT and Hon. CARLL H. DE SILVER; an oil painting entitled "A Winter Scene in Norway," by J. JUNGBLÚT, from HENRY BATTERMAN; a Japanese carving in wood and ivory with gold lacquer ornaments representing the Chinese warrior WU YUNG, presented by THOMAS T. BARR; an oil painting, "The Morteratsche Glacier, Upper Engadine," by ALBERT BIERSTADT, presented by Mrs. ALBERT BIERSTADT; a Japanese palanquin, a Japanese wrought-iron eagle, and a Japanese image representing the Dragon King Rio Wo, presented by ALFRED T. WHITE; a replica of the Lemnian Athene from the bronze original by PHIDIAS, presented by GEORGE FOSTER PEABODY, and 69 additional pieces of European china from the Reverend ALFRED DUANE PELL. Among the important loans to the art exhibits of the Museum are 34 oil paintings from Hon. CARLL H. DE SILVER; 18 oil paintings from the Hon. CHARLES A. SCHIEREN, and a collection of Japanese lacquers, bronzes and porcelains from CLAYTON L. MOAK; a collection of 46 18th Century fans from Mrs. E. LE GRAND BEERS; a painting from Mrs. E. L. GOODNOW and Mrs. I. L. BIGELOW; also one painting each from ROBERT J. KIMBALL, WILLIAM S. HUGHES and Colonel HENRY T. CHAPMAN, and 119 pieces of Tiffany favrile glass loaned by CHARLES W. GOULD. Fuller descriptions of the accessions to the

scientific and art collections will be found under the reports of the Museum (1902-1903).

The Department of Ethnology was established in February, and STEWART CULIN was appointed Curator of Ethnology in March, 1903. Seventeen of the Trustees subscribed each \$100 to meet the expenses of making collections in Ethnology in Arizona and New Mexico. Mr. CULIN was sent in April on a six months' expedition to the southwest, and the very large ethnological collections made by CHARLES DAY, of Arizona, were purchased for the Museum by Mr. CULIN through the generosity of A. AUGUSTUS HEALY and GEORGE FOSTER PEABODY. The collections in Ethnology were also enriched by important gifts of objects from Hawaii, presented by Colonel ROBERT B. WOODWARD and GEORGE C. BRACKETT; by collections of pottery from the Pueblos of New Mexico and Arizona, presented by the Hon. CHARLES A. SCHIEREN; and by Chinese and Indian coins presented by ROBERT C. W. BROCK, of Philadelphia. JACOB DOLL and CARL SCHAEFFER were sent on an entomological expedition to Texas during the months of April to July. Dr. ALFRED G. MAYER made an expedition to the Bahamas during June and July to study the marine life of the Bahama Archipelago and to make collections for the Museum. A fund of \$1,000 was raised to defray the expenses of the expedition by Professor WILLIAM H. GOODYEAR to study the architecture of France and Constantinople.

The work of completing the interior of the second section of the Museum Building was under way during the entire year. Contracts were made during the year by the Department of Parks of the City of New York for a Museum Power House and Power Plant at \$78,693; for Natural History cases for the second floor of the Museum at \$23,450; for orchestra chairs for the Museum auditorium at \$13,272. The city appropriated for the annual support

and maintenance of the two Museums of the Institute \$70,000. Plans and specifications for the third section or eastern wing of the northern façade of the Museum Building were prepared by the architects and on July 1, 1903, the Board of Estimate and Apportionment of the city authorized the issue of the corporate stock of the city to the amount of \$454,000 to provide for the construction of the third section or eastern wing of the Museum.

#### 1903-1904

During the year 1903-1904 the work of the Institute was seriously affected by the destruction on November 30 of the Academy of Music, in which the most largely attended concerts and lectures had been given. Through the courtesy of the pastor, officers and trustees of the Baptist Temple, the use of the Temple was very generously made available for the larger concerts during the year, and most of the educational work was carried out as planned, but with reduced membership and attendance.

To the collections in the Department of Ethnology a collection of carved figures and implements from the South Sea Islands was added through the generosity of A. AUGUSTUS HEALY, Hon. CARLL H. DE SILVER and Colonel ROBERT B. WOODWARD. A collection illustrating the ethnology of the Zuñi Indians was presented by several Trustees of the Institute at an expense of \$1,000. Some one hundred and seventeen enlarged bromide photographs, illustrating the architecture of France, from negatives obtained by Professor WILLIAM H. GOODYEAR in the summer of 1903, were made, framed, exhibited for three weeks in the Boston Public Library in April and hung in the Museum in May. Large additions were made to the Natural Science Collections through the expeditions of ALFRED G. MAYER, D.Sc., to the Bahamas and to the coast of Massachusetts; of JACOB DOLL and CARL SCHAEFFER to southern Texas, and through

gifts from the New York Zoölogical Society and many friends of the Institute. The position of Curator-in-chief of the Museums was created in February and held by ALFRED G. MAYER, D.Sc., from February until May 15 and after that date by FREDERIC A. LUCAS. Subscriptions were made during the year for the purchase of the painting, "The Vision of the Dying Virgin," by CORNELIS SCHUTT, amounting to \$3,600; for the Biological Laboratory at Cold Spring Harbor, \$980, and for the purchase of collections for the Museum, \$5,600. The Reverend ALFRED DUANE PELL added some 200 pieces to his collection of European China. GEORGE A. HEARN presented a landscape painting by GEORGE H. BOGERT. Bequests were received from the estate of HENRY K. SHELDON of \$2,375, to be added to the general endowment fund, and of \$9,500, the income from which is to be used in support of Orchestral and Chamber Music Concerts. Bequests were also received from the estates of Mrs. AUGUSTUS M. OSBORN of \$1,905, and from WILLIAM F. SEBERT of \$500, together with two telescopes equatorially mounted.

Contracts were let during the year by the Department of Parks, with the advice and approval of the Trustees, for 38 ethnological cases at \$18,496, and for painting the interior of the second Museum section at \$6,850. The Second Section of the Museum was completed in June and the Power House and Power Plant in July, 1904. The Natural History cases were set up on the second floor of the second Museum section in May and June, at a cost when completed of \$23,450. The city appropriated for the maintenance of the Museums for the year \$70,000, and the entire income of the Institute was \$162,873.60. The contract for erecting the Eastern Wing or Third Section of the Museum was awarded by the Department of Parks in December, 1903, for \$407,315, and in February, 1904, for the electric light fixtures for the second Museum section for \$7,216. On

June 17, the Board of Estimate and Apportionment appropriated \$97,000, to be used in constructing the front steps and substructure, and in defraying the cost of carving the pediment of the front portico of the Museum. The work of building the Third Section of the Museum was begun by breaking ground on March 7 and by laying the foundations on June 15.

1904-1905

In this educational year the number of members of all classes was 6,897; the attendance at the Children's Museum 88,413, at the Central Museum 107,150, at the lectures, concerts, readings, classes, etc., 211,587, and the total attendance was 407,150. The endowment funds were increased by \$1,100 contributed by a woman of Brooklyn, the interest of which will be used in providing law lectures for women by women, and by \$6,293.41, the final payment from the estate of the late JAMES A. H. BELL. The subscriptions to special funds were \$500 from A. A. Low for Lectures on the Fine Arts, \$1,225 for researches at the Biological Laboratory, Cold Spring Harbor, and \$15,163.25 for the Museum Collection Fund subscribed by many members. The total income for the year ending May 1, 1905, was \$174,537.35.

Among the more important additions to the Museum Collections were a marble sculpture entitled "Poetry," by SALVATORE ALBANO, purchased with proceeds of the ELLA C. WOODWARD MEMORIAL FUND; a marble sculpture entitled "Polyxena," by WILLIAM W. STORY, presented by GEORGE FREIFELD; a marble sculpture entitled "Christ and St. John," heroic size, by WILLIAM ORDWAY PARTRIDGE, presented by Mrs. CHARLES R. BAKER in memory of the late Reverend CHARLES R. BAKER, D.D., Rector of the Church of the Messiah for many years, and a trustee of the Institute from 1890 until his decease in 1898; a marble sculpture entitled "Eve" by HIRAM POWERS, presented by Mrs. MARY S.

CROXSON; an antique Roman Torso of a caryatid of the 1st or 2d Century, in Cipollino marble, recently found in Rome, presented by A. AUGUSTUS HEALY; a bronze sculpture by BARYÉ entitled "The Lapith and the Centaur," presented by Mrs. FANNIE AVERY WELCHER; a painting by EDWIN L. WEEKS entitled "Hour of Prayer at the Pearl Mosque, Agra," presented by GEORGE D. PRATT; a painting by EDWIN L. WEEKS entitled "A Scene in Morocco," purchased from the Museum Collection Fund of 1904; a painting by W. T. RICHARDS entitled "On the New England Coast," presented by SAMUEL P. AVERY; a painting entitled "A Gray Morning," by LEONARD OCHTMAN, purchased from the JOHN B. WOODWARD FUND; a painting entitled "Autumn Oaks, Forest of Fontainebleau," by PAUL DOUGHERTY, presented by GEORGE FOSTER PEABODY; a painting called "The Captive," by R. A. BLAKELOCK, presented by the Hon. CHARLES A. SCHIEREN; a Sicilian Cart from Palermo, presented by GEORGE C. BRACKETT; a collection of Chinese porcelain vases and Japanese pottery, presented by the Hon. CARLL H. DE SILVER; a collection of coins and two casts of Greek and Græco-Roman reliefs presented by FRANK SHERMAN BENSON; a collection of Japanese lacquers and one bronze ink horn, presented by Colonel ROBERT B. WOODWARD; a painting entitled "On the Bosphorus," by F. A. BRIDGMAN, presented by PETER GEDDES; a collection in Egyptology, purchased by FLINDERS PETRIE, and paid for out of the Museum Collection Fund of 1904; a collection of Egyptian bronzes and a collection of Tanagra figures purchased with the Museum Collection Fund of 1905; a collection of gold ornaments (100 B. C. to 200 A. D.), purchased with the ELLA C. WOODWARD FUND; a collection in Greek and Roman Archæology, purchased from GEORGE N. OLcott, Ph.D., with the Museum Collection Fund of 1904. Ethnological collections from the Southwest were purchased by STEWART CULIN with the aid of the Museum Collection

Fund of 1904, at a cost of \$1,553.85. To the Natural History collections many additions were made with the aid of the Museum Collection Fund of 1904 and through the generosity of friends. The Reverend J. L. ZABRISKIE presented a very complete collection of the Fungi of Long Island. Lists of gifts and also of loans to the Museum collections are printed under the several departments.

Expeditions were made by GEORGE K. CHERRIE, Curator of Ornithology, to the Valley of the Orinoco; by STEWART CULIN, Curator of Ethnology, to Arizona and California; and by CARL SCHAEFFER, Assistant Curator of Entomology, to Arizona and New Mexico.

The Pavilion or Second Section of the Museum was completed and turned over by the Park Department to the Institute on February 11; the Power House and Power Plant were completed and turned over to the Institute on March 21; the new Lecture Hall, with a seating capacity of 1,250 was first opened for lectures on March 4. During March, April and May, collections were installed in the galleries of the Second Section of the Museum, and this section together with the Hall of American Ethnology, was formally opened to the public on the evening of June 1.

On the recommendation of the Institute and at the request of the Park Commissioner, the HON. MICHAEL J. KENNEDY, the Board of Estimate and Apportionment on March 15, and the Board of Aldermen on April 18, authorized the issue of corporate stock of the city to the amount of \$131,000, to be used in providing thirty monolithic sculptures for the façades of the Museum Building, cases for the third Museum section, and roadways, walks, sewers, grading and sodding in the rear of the Museum. The sum of \$75,000 was appropriated for the maintenance of the Institute Museums for the fiscal year 1905. On April 12, Governor Higgins signed a legislative enact-

ment requiring the removal of the Kings County Penitentiary from its present location east of the Museum. On June 23, the Board of Estimate and Apportionment authorized the purchase by the city, as an addition to Institute Park, of the triangle of land directly east of the Museum site and bounded by the Eastern Parkway, Classon and Washington Avenues. On June 15, the Park Department awarded the contract for the roadways, walks, sewers, grading and sodding in the rear of the Museum at \$10,200.

The work of constructing the third or Eastern Section of the Museum was under way during the entire year, and on July 1 the walls were at the eave-line of the building. The architects, McKim, Mead and White, prepared final drawings and specifications for the front steps and central approach to the Museum, including extensive storage rooms under the steps and platform, and the contract for the building of the steps, central approach and storage rooms was awarded on June 22 to the P. J. Carlin Construction Company at \$88,900.

The Institute had been without the use of an Academy of Music building since November, 1903. The Board of Directors of the new Academy of Music prepared specifications during the year for a building intended to accommodate the work of the Institute. The building includes a main auditorium seating 2,200, a chamber music room seating 1,400, a lecture room seating 400, class rooms, studio rooms and offices of administration to meet the needs of the Institute.

#### 1905-1906

This was one of the most important years in the history of the Institute in the laying of foundations for its future usefulness. The total recorded membership was 6,347, the attendance at the Children's Museum, 93,132, at

the Central Museum, 135,523; at the lectures, concerts, readings, classes, etc., 190,089, and the total attendance, 418,744. The Endowment Funds were increased by the bequest of \$5,000 by EUGENE G. BLACKFORD. The Museum Collection Fund of 1906, made up of subscriptions by many Members, was \$9,767. \$2,000 was received for the purchase of a painting by FANTIN LATOUR—\$1,000 subscribed by A. AUGUSTUS HEALY and \$1,000 by GEORGE A. HEARN. The Biological Laboratory Research Fund (subscriptions by Members) amounted to \$955. The total income for the year, ending May 1, was \$183,332.83. Twenty-two shares of stock of the Brooklyn Art Association were presented to the Institute—most of these shares in exchange for Institute Life Membership Certificates. Six persons became Life Members by the contribution of \$100 or more to the Institute Funds. To GEORGE A. HEARN and Mrs. LILLA BROWN were issued Permanent Membership Certificates on account of the gift by each of them of \$1,000 and upwards, or property valued in excess of \$1,000.

Mrs. EUGENE G. BLACKFORD contributed the sum of \$20,000 to be used in erecting THE EUGENE G. BLACKFORD MEMORIAL HALL at the Biological Laboratory at Cold Spring Harbor.

Among the more important additions to the Museum collections are a marble sculpture, "Bacchante," by FREDERICK MACMONNIES, purchased for \$5,000 from the income of the ELLA C. WOODWARD MEMORIAL FUND; a painting "Portrait of a Lady," by FANTIN LATOUR, purchased for \$3,500—\$1,000 being contributed by A. AUGUSTUS HEALY and \$1,000 by GEORGE A. HEARN, and \$1,500 being paid from the Museum Collection Fund of 1905; a painting, "Near the Marsh," by R. SWAIN GIFFORD, presented by the Hon. CARLL H. DE SILVER; a painting, "The Trio," by HERBERT DENMAN, presented by CHARLES H. GENUNG, EMIL CARLSEN HOWARD and WILLIAM L. CARRIGAN in

memory of Mr. DENMAN; four paintings, "The Crucifixion," "A Resting Place for Prisoners," "The Road of the War Prisoners," all by V. VERESTCHAGIN, and "The Day of Pentecost," by JURIAN OVENS, presented by Mrs. LILLA BROWN in memory of her husband, the late JOHN W. BROWN; three paintings, "The Lazy Sea," by EMIL CARLSEN, "Dreamland," by HENRY GOLDEN DEARTH, and "After the Rain," by PAUL CORNOYER, purchased with the income of the JOHN B. WOODWARD MEMORIAL FUND; seventeen paintings, representing the Italian school of the 17th century, presented by FRANCIS GOTTSBERGER in memory of his wife, the late Mrs. ELIZA GOTTSBERGER, a list of which paintings is given under the Department of Fine Arts in this volume; a painting, "The Mosque," by LOUIS C. TIFFANY, presented by GEORGE FOSTER PEABODY; a series of Roman mosaics from the north of Africa purchased for \$1,743.75 from the Museum Collection Fund of 1905; a painting, "Return to the Coast," by HENRI RENE RAVANT, presented by ABRAHAM ABRAHAM; a painting, "The Fugitive," by THOMAS COUTURE, purchased from the Museum Collection Fund of 1906; a painting, "Adoption of the Constitution," by J. B. STEARNS, presented by SYLVESTER L. STEARNS; and a portrait painting of "James S. T. Stranahan," by DANIEL HUNTINGTON, presented by Mrs. MARY S. CROXSON.

Ethnological collections from the southwest and from the Pacific Coast were purchased, at an expense of \$1,691.40 from the Museum Collection Fund of 1905, by STEWART CULIN. JULIUS W. BRUNN presented a collection of upwards of 2,500 shells; the late EDWARD B. STURGES presented his botanical collection of upwards of 10,000 specimens, and to the Natural History Collections many additions were made through the generosity of friends. Lists of gifts and loans are given in detail under the several departments.

During the summer of 1905 expeditions were made by STEWART CULIN to Arizona, New Mexico and the Pacific Coast for the collection of ethnological material; by Professor WILLIAM H. GOODYEAR, to western Europe for the development and illustration of his researches in Architectural refinements; and by CARL SCHAEFFER, to Arizona for making collections in Entomology.

The sum of \$80,000 was appropriated by the City for the maintenance of the Museums. Specifications for the contract for furnishing thirty monolithic sculptures and for carving the pediment on the façades of the Central Museum were prepared by the architects and DANIEL C. FRENCH was selected as the sculptor. Specifications for the electric light and other fixtures for the third section of the Museum were prepared and the contract for the furnishing of the same was awarded by the Department of Parks of the City at \$4,750. The exterior of the third section was completed and the front steps and central approach were about four-fifths constructed. The land opposite the Willinck entrance was purchased by the City and added to Institute Park. The triangle of land east of the Museum, authorized to be purchased by the City, was nearly all acquired. \$50,000 was appropriated by the City to pay the architects of the Museum for plans and a plaster model of the complete Museum building. Floor plans for a new fireproof Children's Museum building were prepared.

ALFRED T. WHITE, a member of the Board of Trustees, in the spring of 1905 subscribed \$25,000 for instruments for the Astronomical Observatory connected with the Museum, and the State Legislature passed an Act, Chapter 637 of the Laws of 1906, authorizing the transfer of the site of the Observatory from a point southeast of the Museum to a location southwest of the Museum, near Flatbush Avenue, and providing for the erection by the City of an Observatory building at a cost not exceeding \$150,000.

on the new site, its maintenance by the City and its administration by the Institute under an agreement with the City, for the benefit of the people of the City, especially for the students in the public and private schools, and for the advancement of the science of Astronomy.

Through the courtesy of ALFRED T. WHITE friends of the Institute subscribed \$50,000 to the funds of the Institute to be used in the purchase of plants for the Botanic Garden and Arboretum, Institute Park; and the State Legislature passed an Act, Chapter 618 of the Laws of 1906, authorizing the City to enter into an agreement with the Institute to establish and maintain such Garden and Arboretum in Institute Park, to contribute annually for its maintenance and to erect plant houses and rooms for instruction in botany at a cost not exceeding \$100,000, the whole to be administered for the benefit of the residents of the City and especially for the instruction of students in the public and private schools of the city, and for botanical research.

#### 1906-1907

The total membership was 6,552. The attendance at the Children's Museum was 92,996, at the Central Museum, 148,664; at the lectures, concerts, readings, classes, etc., 190,595, and the total attendance was 432,255. Forty-eight shares of stock in the Brooklyn Art Association were transferred by their owners to the Institute in exchange for Life Memberships in the Institute. The Endowment Funds of the Institute were increased by a bequest from Mrs. CAROLINE H. POLHEMUS of \$10,000, the income of which is to be used in providing for the care and increase of the Art Collections bequeathed to the Institute by Mrs. POLHEMUS, and by a gift from the late SAMUEL N. HOYT of \$20,000, to be applied for the benefit of the Institute. The sum of \$1,055 was subscribed to the Biological Laboratory Research Fund and \$8,072.20 to the Museum Collection

Fund of 1907. The income in the General Fund was \$14,400.59, in the Associate Fund, \$80,513.82, from Special Endowments, \$6,274.43, from subscriptions, \$13,027, for the maintenance of the Museum, \$83,710.15, making the total income for the year, \$197,925.99.

Mrs. EUGENE G. BLACKFORD, who contributed in 1905-6 the sum of \$10,000 to a special fund to be used in erecting THE EUGENE G. BLACKFORD MEMORIAL HALL, at the Biological Laboratory at Cold Spring Harbor, increased her contribution during the year to \$23,000. The building was completed and furnished in May, was presented to the Institute completely furnished by Mrs. BLACKFORD and her daughters, and on June 1, 1907, was dedicated with appropriate exercises.

Among the more important additions to the Museum were a collection of works of art bequeathed by Mrs. CAROLINE H. POLHEMUS, comprising 51 oil paintings, 11 water colors, 6 paintings in porcelain and many other art objects; oil paintings, as follows: "Jupiter and Antiope," of the 18th Century Flemish School, presented by DANIEL KINGSLAND DE BEIXEDON; "Spring Woods," by HENRY W. RANGER, presented by WILLIAM T. EVANS; "The Water Carrier," by HECTOR LEROUX, presented by PETER GEDDES; an altar piece (Triptych) in tempera on wood panels, by SANO DI PIETRO of Siena (15th Century), CORREGGIO'S "Madonna di San Giralmo," in gallery at Parma (an 18th Century copy), and "A Street Scene in Milan," by G. BELLONI, presented by A. AUGUSTUS HEALY; "March," by BRUCE CRANE, presented by GEORGE A. HEARN; "A Horse's Head," by EUGENE VERBOECKHOVEN, presented by GEORGE FOSTER PEABODY; "A Christian Martyr" and "The Unruly Calf," the latter by WINSLOW HOMER, presented by CHARLES A. SCHIEREN; "Portrait of a Lady," by JAMES MCNEILL WHISTLER, purchased with contributions of several members; "A Market Scene in Venice," by A. MILESE, purchased

with Museum Collection Funds; "The Midnight Moon," by ELLIOTT DAINGERFIELD and "Portrait of Eugene G. Blackford," by RICHARD CREIFELDS, purchased with income of the JOHN B. WOODWARD MEMORIAL FUND. Additions were made to the Japanese collections of pottery, metal work, ivory, etc., by CARL H. DE SILVER, ROBERT B. WOODWARD and E. LE GRAND BEERS; to the collections of china and glassware by the Reverend ALFRED DUANE PELL; to the collections of casts by CHARLES M. HIGGINS and Mrs. JULIA L. SLACK, and by purchases made with the Museum Collection Fund of 1905. A full list of the gifts, exchanges, loans and purchases of art objects during the year is given at the end of Year-book Number 19.

The Henry A. Ward collections of sponges and corals were purchased from Ward's Natural Science Establishment for the sum of \$5,000 paid from the Museum Collection Fund of 1906. A list of accessions to the Scientific Collections through gift, purchase or exchange, is given at the close of Year-book Number 19.

The Ethnological Collections were increased by the expedition of STEWART CULIN to Arizona, New Mexico and the Pacific Coast, and through the expedition of HENRI DE MORGAN to Egypt.

The sum of \$95,000 was appropriated by the city for the maintenance of the two Museums for the year 1907. The front steps, the central approach, the storerooms and sub-structure under the steps, and the approach to the Central Museum, were completed on December 24, 1906, at a cost of \$93,830. The third section or eastern wing of the Central Museum was completed on March 3, 1907, at an approximate cost of \$442,500. The contract for furnishing thirty monolithic sculptures for the façades of the Central Museum building and for carving the pediment of the front porticos of the same was made in January, 1907, by the Department of Parks of the city, the work to be done by DANIEL C.

FRENCH, sculptor, and sculptors that he may associate with him, at a total cost (including the architect's fees) of \$122,000. A contract was also made by the Park Department with the architects of the Museum Building in April, 1907, to furnish drawings and a plaster model of the completed Museum Building, at a cost of \$50,000, the same to be applied to the architect's regular commission, from time to time, as additional sections of the building are erected. A contract for painting and decorating the interior of the third Museum section was made by the Park Department on June 27, at \$3,630, and specifications for Museum cases for the third section were in process of preparation throughout the year.

Forms of agreement as between the city and the Institute for the establishment and maintenance of a Botanic Garden and of an Astronomical Observatory in Institute Park, in pursuance of Chapters 618 and 637 of the Laws of 1906, were prepared in accordance with surveys made, were approved by the Board of Park Commissioners on January 17, 1907, were forwarded to the Board of Estimate and Apportionment, were referred by said Board to the Comptroller, were by him favorably reported to the Board on July 8, and now await the action of the Board.

Three laws were enacted by the State Legislature affecting the Institute as follows: (1) Chapter 43 of the laws of 1907, which removes the restriction heretofore placed upon the Board of Estimate and Apportionment of the city in making annual appropriations for the maintenance of the Institute Museums; (2) Chapter 120 of the Laws of 1907, which authorizes the city to erect a new fireproof Children's Museum building and provide for the care and maintenance of the same by the Institute; (3) Chapter 515 of the Laws of 1907, which authorizes the city to acquire the unimproved lands about the Prospect Park Plaza and along the northern side of Eastern Parkway in front of the Central Museum

Building as sites for public buildings. Copies of these laws are printed at the end of this volume.

#### 1907-1908

The principal effort of the year was to prevent a serious reduction in the membership and a financial loss as a result of the critical business situation which began in October and continued until April. On account of the unusual effort made, the credit balance of the Institute was reduced only \$1,899.55. The membership was increased from 6,552 to 6,703. The total income available for meeting current expenses was \$209,893.63. The attendance at the Children's Museum was 97,805, at the Central Museum 194,985, at the lectures, concerts, courses of instruction, exhibitions, etc., 204,655, or a total of 497,445.

The appropriation by the city for the maintenance of the two museums was \$95,000, and the city expended in furnishing cases for collections at the Central Museum \$7,245. The subscriptions by members to the Museum Collection Fund were \$8,238, and to the Biological Laboratory Research Fund \$900.

The Institute received the International Congress of Zoologists at its Biological Laboratory on August 27, and at the Central Museum on September 1. On December 14 the second and third sections of the Central Museum were dedicated, formally turned over to the Institute by the Department of Parks of the city, the third section of the Museum was formally opened to the public, the twelfth anniversary of the laying of the cornerstone of the Museum was celebrated and the bronze statue of General JOHN B. WOODWARD, President of the Institute at the time that the plans for the Museum were made, was presented to the Institute by the Citizens' Committee on THE JOHN B. WOODWARD MEMORIAL.

DANIEL C. FRENCH, sculptor, and twelve other sculptors

associated with him, were engaged during the year in making their studies (one-quarter size and one-half size) of the thirty monolithic sculptures for the façades of the Central Museum Building, and the designs were approved by the Trustees of the Institute, the Park Department and the Municipal Art Commission. The preliminary design for the sculptures to be placed on the pediment over the front portico of the Museum was made by Mr. FRENCH. Messrs. MCKIM, MEAD and WHITE, architects, were at work during the year on the plans for the completed Central Museum Building, and the first studied drawing was completed on June 25.

Among the more important additions to the Museum Collections were the bronze statue of General JOHN B. WOODWARD; the large collection in Egyptian art and archæology made by HENRI DE MORGAN in Egypt in 1897 at an expense of \$2,892.38, paid from the Museum Collection Funds; The De Potter Collection of Egyptian antiquities purchased at \$2,800, paid from the Museum Collection Fund of 1907; the CHARLES A. DAYTON Collection of Shells comprising 3,700 species and 20,000 specimens purchased with part of the Museum Collection Fund of 1907; twenty-seven specimens from the New York Zoölogical Society, a large collection in Ethnology secured in Arizona, New Mexico and the Pacific states by STEWART CULIN, Curator; collections of birds, mammals and other forms of life made by GEORGE K. CHERRIE, Curator, in South America and the West Indies; an Egyptian Stele in sandstone, presented by ALFRED T. WHITE; an Egyptian Stele in black syenite, presented by GEORGE C. BRACKETT and ALFRED T. WHITE; oil paintings as follows:

From FRANCIS GOTTSBERGER:

“Christ and the Tribute Money,”

“Adoration of the Shepherds,”

“Adoration of the Magi,”

**"Death of Queen Dido,"**

all 17th Century Italian.

From PETER A. LEMAN:

"A Landscape," by HENRY D. SMITH;

"An Old Mill," by DAVID JOHNSON;

"An Italian Landscape," by WILLIAM DE HEUSCH.

From FREDERIC B. PRATT:

"Lake Henderson," by CHARLES D. HUNT.

From GEORGE D. PRATT:

"An Interesting Game" (Cairo Café), F. A. BRIDGMAN.

From ALFRED T. WHITE (two water colors):

"Captives of Ramses II.,"

"The Bronze Statue of Buddha at Kamakura."

From GEORGE A. HEARN:

"Landscape," by ALEXANDER T. VAN LAER;

"Landscape," by CULLEN YATES.

From the JOHN B. WOODWARD MEMORIAL FUND:

"February," by E. W. REDFIELD;

"Southfield Marshes," by FREDERICK W. KOST.

CARLL H. DE SILVER presented twenty-three pieces of Japanese art; the Reverend ALFRED DUANE PELL, seven pieces of porcelain and six pieces of glass. A complete list of the additions and the loans to the Museum Collections during the year is given on pages 263-277 of Year-book, number 20.

The opening of the third section of the Museum made possible a re-arrangement of parts of the Museum Collections and a fuller classification of them.

**1908-1909**

While in other years important steps have been taken in preparing the way for the development of the Institute the year 1908-1909 is notable in the following: (1) The removal of the down town work of the Institute from the Young

Men's Christian Association Building in Fulton Street, the Art Building in Montague Street, the Baptist Temple on Third Avenue, the Polytechnic Institute in Livingston Street, the Packer Institute in Joralemon Street, and the Long Island Historical Society Hall in Pierrepont Street, to the new Brooklyn Academy of Music on Lafayette Avenue, between Fulton Street and Flatbush Avenue, together with the occupancy of the building from September 16 to the end of the season. (2) The establishment of the INSTITUTE BULLETIN, folio size, published weekly from the 11th of September until the 29th of May inclusive,—38 numbers. (3) The establishment of INSTITUTE BRANCHES at Flushing and Garden City in September, and at Hempstead and Huntington in December, 1908. (4) The addition to the art collections of the Museum of 83 water color paintings by JOHN S. SARGENT at a cost of \$19,514. (5) The agreement by the Board of Estimate and Apportionment of the City of New York to the establishment and maintenance of a Botanic Garden and Arboretum in Institute Park in accordance with the terms heretofore approved by the Trustees of the Institute and the Board of Park Commissions of the city, and the further agreement on the part of the Board of Estimate and Apportionment to remove the site of the Astronomical Observatory from a point southeast of the Museum Building to a point southwest of said building.

The total number of new members enrolled during the year, including the Branches, was 1,596, the largest increase in the history of the Institute. The attendance upon the events that were free to the members was 132,476; upon the events where a charge is made for reserved seats 110,149, and upon special courses of instruction 15,650. The attendance at the Children's Museum was 125,708, and at the Central Museum 210,703; making the total for the year 594,686, an increase over the previous year of 97,241.

The receipts for the several funds, grouped, were, for the General Fund including initiation fees and interest on the General Endowment Funds \$18,791.41; Associate Funds \$128,742.19; income of Special Endowment Funds \$6,803.01; subscriptions for the purchase of Museum Collections \$22,359.02; for the maintenance of the Museums \$95,305.73; total receipts for the year \$272,001.31, an increase over the preceding year of \$62,107.68. The appropriation by the city for the maintenance of the Museums for the year 1909 was \$103,905, an increase of \$8,905 over the preceding year.

Mr. DANIEL C. FRENCH and the twelve sculptors associated with him in creating the thirty monolithic sculptures for the façades of the Museum, completed their work. The sculptures were cut in Indiana limestone and prepared to be placed upon the façades of the Museum during the months of July and August, 1909. Messrs. MCKIM, MEAD & WHITE, architects, completed the preliminary drawings for the completed Museum Building including the Astronomical Observatory upon its new site. The Permanent Endowment Funds of the Institute were increased by the amount of \$11,013.62 received through the courtesy of Miss MARY BENSON, the same to be known as the FRANK SHERMAN BENSON FUND, the income of which will be expended from time to time in enriching the Museum collections.

Many additions were made to the collections in the Museum by gift and by purchase and \$6,829 was subscribed to the Museum Collection Fund of 1909. Among the more important gifts are the 83 water color paintings by JOHN S. SARGENT, presented by the subscribers to the JOHN S. SARGENT FUND already referred to; an oil painting entitled "The Portrait of a Lady," by BALTHAZAR DENNER, presented by ALFRED T. WHITE; a marble sculpture "Cleopatra before Cæsar," by V. LUCARDI, presented by the estate of JOHN T. MARTIN; a portrait painting of the

Rev. Richard S. Storrs, D.D., LL.D., by Miss ELEANOR C. BANNISTER, presented by Miss BANNISTER; an oil painting entitled "A Gypsy Encampment," by THOMAS GAINSBOROUGH, presented by Mrs. JOSEPH C. HOAGLAND; 2 oil paintings presented by FRANCIS GOTTSBERGER; 21 Greek terra-cotta Tanagra figurines, presented by A. AUGUSTUS HEALY; 87 terra-cotta ancient Egyptian moulds, Japanese and other pottery, by CARL H. DE SILVER; and Collections in Ethnology from the Maidu, Pomo and Navajo Indians of California and Arizona, made by Mr. STEWART CULIN and purchased with part of the Museum Collection Fund of 1908.

#### 1909-1910

In the educational year 1909-1910 the Institute occupied the Academy of Music for a second season. The attendance on events that are free to the members of the Institute was 130,352; on the classes, or courses of instruction, 17,261, and on the pay events, where a charge is made for reserved seats, 93,225, making a total for the year of 240,746. The attendance at the Children's Museum was 133,919, and at the Central Museum, 206,830, making the total attendance, including the 240,746 above stated, 581,515.

The income for the year that was available for meeting current expenses of the Institute, as summarized from the Treasurer's Annual Report, under the main funds, was as follows: For the General Fund, \$13,728.28; for the Associate Fund, \$115,601.62; for Special Income Fund Accounts, \$6,848.78; for Special Funds, through subscriptions, \$50,148.12; for the Museum Funds, \$102,888.26, making a total of receipts of \$289,215.06.

On June 24, 1909, the Board of Estimate and Apportionment of the City, acting under Chapter 637 of the Laws of 1906, changed the site of the Astronomical Observatory from a location near the southwest corner of the Museum site to a location west of the Museum and south of Prospect

Heights Reservoir. During July, August and September the thirty monolithic sculptures by Mr. DANIEL C. FRENCH, and other sculptors associated with him, were placed on the façades of the Museum Building, and during the period from January until June, 1910, work was in progress on the pedimental group of sculptures that is to be placed over the front portico of the Museum.

On December 28, 1909, a contract was entered into between the city and the Institute for the establishment and maintenance of a Botanic Garden and Arboretum on lands south of the Museum site. Since the first of February a topographical survey map of the Botanic Garden grounds has been made; Messrs. OLMSTED BROTHERS have been engaged as landscape architects for the Botanic Garden and Arboretum, and Prof. C. STUART GAGER, Ph.D., of the University of Missouri, has been elected Director of the Botanic Garden.

The plans and design for the remainder of the Central Museum Building, and for the Astronomical Observatory, were completed by Messrs. McKIM, MEAD and WHITE, architects, in December, and a plaster model and dissection of the Museum Building as it will appear when completed has been prepared and placed on exhibition in the vestibule of the Museum.

Two great collections of works of art have been added,—one comprising 95 Chinese Cloisonné and Jades presented by Mr. SAMUEL P. AVERY,—the other comprising the CYRUS J. LAWRENCE collection of Barye Bronzes, Paintings and Sketches presented by members and friends of the Institute. Other important gifts are specified under Accessions to the Museums. See Table of Contents.

The Board of Estimate and Apportionment of the City of New York, on June 4 appropriated, on account of the issue of corporate stock of the city, the following:

For construction of Plant Houses in Botanic Garden and Arboretum .....	\$25,000.00
For construction of Rooms for Instruction in Botany .....	25,000.00
For construction of an addition to the Institute Museum Building .....	100,000.00
For architects' and engineers' fees in connection with the construction of an addition to the Museum Building .....	20,000.00
For installation of Museum cases and library stacks .....	15,000.00
	<hr/>
	\$185,000.00

The Board of Estimate also released previous authorizations of corporate stock as follows:

Unpaid balance on Museum Sculptures.....	\$141.75
For completion of addition to the Museum of Arts and Sciences .....	26,103.91
	<hr/>
	\$26,245.66

The total amount available on account of the Museum and Botanic Garden and Arboretum for the year 1910-11 was..... \$211,245.66

#### 1910-1911

During the year 1910-11 the attendance at the Children's Museum was 152,815; at the Central Museum, 193,690, and at the lectures, concerts, courses of instruction, dramatic readings, etc., 253,105, making a total attendance for the year of 599,610. The receipts on account of the various funds that were available for expenditures during the year were as follows:

The General Fund .....	\$12,776.54
The Associate Funds .....	124,097.90
The Income of Special Endowment Funds..	11,646.85
Subscriptions for purchase of collections....	26,356.00
For City maintenance of the two Museums..	105,034.38
For City maintenance of the Botanic Garden.	5,027.86

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Total income for the Year..... \$284,939.53

The Permanent Endowment Funds were increased as follows: From the estate of FREDA M. BRUNN \$5,000, the income of which will be available for the care and increase of the Collection of Shells presented by JULIUS W. BRUNN to the Institute; \$2,500 from Miss CORNELIA PRIME for the establishment of the TEMPLE PRIME SCHOLARSHIP, to be awarded each year to a person highly competent to carry on research work at the Biological Laboratory, Cold Spring Harbor, and \$15,000 contributed by two friends of the Institute as the CHARLES STEWART SMITH MEMORIAL FUND, the income of which is to be expended in the purchase of works of art for the Institute Museum.

Mr. WILLIAM A. PUTNAM, a member of the Board of Trustees, presented a collection of Royal Copenhagen Porcelains numbering 96 pieces; Mr. SAMUEL P. AVERY presented 57 pieces of Chinese Cloisonné and Jades in addition to those that were presented by him in 1909-10, and Mr. GEORGE A. HEARN presented, on June 9th, 5 very valuable paintings by American artists. These are enumerated in the list of gifts published in subsequent pages of this volume. A large number of objects of scientific and artistic value were presented, lists of which are given in subsequent pages of this volume, and among the more important purchases for the Museum was the collection of

North American birds, containing 1,670 specimens of exceptionally fine quality.

Two measures of interest to the Institute were passed by the Legislature: First, an Amendment to the Law authorizing the establishment of the Brooklyn Botanic Garden and Arboretum, and second, a Law authorizing the City of New York to enter into an Agreement with the Institute for the establishment, maintenance and development of the Institute Museum, Eastern Parkway and Washington Avenue, and Branches thereof, in the Boroughs of Brooklyn and Queens.

The City of New York appropriated for the maintenance of the Central and Children's Museum during the year 1911 \$105,905, and for the maintenance of the Botanic Garden and Arboretum \$14,550.

Plans and specifications for the Instruction Building and Greenhouses for the Botanic Garden and Arboretum were completed by the Architects, Messrs. McKIM, MEAD & WHITE, approved by the Art Commission of the City, and accepted by the Board of Park Commissioners. Plans, specifications and estimates for one section of the Instruction Building and a section of the Greenhouses, with heating plant, were completed and made ready to be advertised and let under a contract at a cost not exceeding \$50,000.

The work of establishing the Brooklyn Botanic Garden made considerable progress. The Garden was formally turned over by the City to the care and custody of the Institute on February 1, 1911. Work on the Garden was begun on April 1 and the Garden was opened to the public on May 13. Mr. NORMAN TAYLOR was appointed Curator-of-Plants, Mr. J. V. BORIN, Head Gardener, Miss BERTHA M. EVES, Secretary and Librarian, and Mr. H. KOLODZSKI, Foreman Gardener.

The Garden received about 500 evergreen trees and shrubs presented by Mr. LOWELL M. PALMER. The northwest

portion of the Garden was graded and two new walks in that section of the Garden were constructed. The planting during the spring of 1911 included a large number of beds representing the Flora of Long Island, and another set of beds illustrating Systematic Botany.

Dr. FREDERIC A. LUCAS, Curator-in-Chief of the Museum during the past seven years, resigned his position to become Director of the American Museum of Natural History on the 15th of June, and Mr. E. L. MORRIS was appointed Acting Curator-in-Chief in place of Mr. LUCAS, resigned.

The contract for making the excavations and putting in the foundations for the Fourth Section of the Museum was awarded by the Board of Park Commissioners on May 18 to the BENEDETTO & EGAN Construction Company for \$54,200. Ground was broken for the Fourth Section of the Museum on June 22. The Board of Estimate and Apportionment on July 6 voted to make the following appropriations:

For the work of construction and equipment	
Museum Building, Sections F and G.....	\$450,000.00
For Architects' Fees on the same.....	11,000.00
For continuing the construction and equipment of the Instruction Building in the Botanic Garden .....	33,000.00
For construction and equipment of Plant Houses .....	17,000.00
For grading, soil improvement, etc., on Botanic Garden .....	30,000.00
For building Roadways, Walks, Stone Steps, Paving, etc. .....	40,000.00
For construction and equipment of Children's Museum .....	\$92,500.00
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Total of appropriations .....	\$673,500.00

## 1911-1912

During the year just past the attendance at the Children's Museum was 163,719; at the Central Museum 179,739; at the lectures, concerts, courses of instruction, conferences, etc. 274,123; at the Institute Libraries 47,854; at the Botanic Garden, 9,000, making the total attendance for the year 674,435.

The receipts on account of the various funds available for the year were:

General Fund .....	\$12,461.18
Associate Funds .....	130,364.00
Income from Special Endowment Funds.....	13,982.28
Subscriptions for the purchase of collections...	27,155.64
For City maintenance of the two Museums...	107,189.95
For City maintenance of the Botanic Garden...	17,613.71
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Total .....	\$308,766.76

The permanent Endowment Funds were increased as follows: From the Estate of ABRAHAM ABRAHAM \$10,000, the income of which will be available for providing lectures on the Fine Arts; from the Estate of HENRY BATTERMAN \$20,000, the income of which may be used in the purchase of works of art for the Museum, and \$300, received in Life Membership fees and added to the General Endowment Fund. The foregoing additions make the total endowments \$502,354.76.

During the year contracts were made with COCKERILL, LITTLE & Co., Inc., for the construction of the first section of the instruction building, the first section of the plant houses and the heating plant for the foregoing in the Botanic Garden at \$55,800; for the construction of museum cases and bookstacks for the Central Museum Section with ELY J. RIESER & Co. at \$10,850; for installing a new night-

watchman's electric light plant at the Central Museum with THE MAINTENANCE COMPANY at \$3,820, and for providing candelabra and other bronze work for the front of the Central Museum.

Specifications have been prepared by Messrs. McKIM, MEAD & WHITE for the Central Section of the plant houses for the Botanic Garden, for additional exhibition cases, bookstacks, counters and storage cases for the Central Museum and also for the superstructure of the fourth section, divisions F and G, of the Museum Building.

Messrs. Ludlow & Peabody were appointed by the Hon. MICHAEL J. KENNEDY, Park Commissioner, as architects for the new Children's Museum Building, and preliminary sketches for the building have been prepared.

The Board of Aldermen of the City of New York in August 1911 confirmed the action of the Board of Estimate and Apportionment taken on July 6, 1911, in making appropriations in the corporate stock budget of the city for the year 1911-12 for the amount of \$673,500, as itemized on page 91 and the city appropriated in November, 1911, for the maintenance of the two museums \$110,335, and for the Botanic Garden \$25,830. Large additions were made to the Museum collections including eight Italian frescoes of the fourteenth to sixteenth centuries; a series of illuminated texts of Italian art; 13 water color paintings by WINSLOW HOMER; several Chinese cloissónés presented by Mr. SAMUEL P. AVERY, and several oil paintings presented by Mr. GEORGE A. HEARN and Mr. WILLIAM T. EVANS; also a sculpture by RODIN entitled "La Danaide" purchased on account of the income of the ELLA C. WOODWARD MEMORIAL FUND, and another sculpture by PROCTOR, a marble lion, purchased from the JOHN B. WOODWARD Memorial Statue Fund.

The Department of Water Supply, Gas & Electricity

transferred through the Sinking Fund to the custody of the Department of Parks, two parcels of Prospect Hill Reservoir lands lying east and south of the Prospect Hill Reservoir, to be added to the Botanical Garden and Arboretum, and an amendment to the original contract between the City of New York and the Institute for the establishment and maintenance of a Botanic Garden and Arboretum by the Institute with the co-operation of the city was made so as to include within the Botanic Garden and Arboretum the above mentioned Prospect Hill Reservoir lands, and so as to permit the use of the income of the Botanic Garden Endowment Fund of \$50,000, for the general benefit of the Botanic Garden and Arboretum.

The Institute as represented by its Department of Agriculture, was largely instrumental in securing the enactment of a law authorizing the establishment of the New York School of Agriculture on Long Island, and in the organization of the Agricultural Education Association comprising representative citizens from all the counties of the southeastern part of New York; as represented by its Department of Ethnology in formulating a plan for a National Association for the Conservation of the American Indian, especially in the southwestern states; as represented by its Department of Pedagogy and in co-operation with committees of the University Club and the Brooklyn League, in preparing a preliminary plan for a University on Long Island; as represented by several of its trustees and officers, in the formation of the Brooklyn Committee on City Plan and in the work of that Committee; as represented by its Department of Zoölogy, co-operating with the American Bison Society and the United States Government, in the establishment of the Wind Cave National Game Preserve in South Dakota, comprising an area of 15,000 acres and providing for an initial appropriation, made by Congress, of

\$32,000; as represented by its Department of Sociology, in promoting interest in charitable institutions and in the study of Eugenics in the City and State of New York; as represented by its several Natural Science Departments, in carrying on a Natural History Survey of Long Island and in the preparation by Dr. ABEL J. GROUT of an illustrated catalogue of the Mosses of Long Island; and as represented by its Departments of Physical Sciences, in the preparation of a plan for an Industrial Museum for the City of New York.

The Institute further, through its Departments, Committees and Officers, has co-operated with many civic organizations, including the Brooklyn League, the Brooklyn Transit Conference, various tree planting associations, the Manufacturers' Association, the Prospect Heights Citizens' Association, the National Fine Arts Federation, the American Association for the Advancement of Science, and the American Museums' Association, the last of which met at the Central Museum and Children's Museum on June 6, 1912.

Application was made to the City of New York for appropriations by the City in its corporate stock budget for 1912-13 as follows:

For the completion of the new Children's Museum Building .....	\$82,500.00
For the completion of the Plant Houses in the Botanic Garden .....	65,000.00
For grading and soil improvement in the Bo- tanic Garden .....	30,000.00
 Total .....	 \$177,500.00
1912-13.	

The attendance on all branches of the Institute for the season has been: Botanic Garden (approximately), 15,000;

Libraries, 49,161; Children's Museum, 178,969; Central Museum, 228,519; Lectures, Concerts, etc., 287,998; making a total of 759,647, or an increase over last year of 85,212.

The receipts for the various accounts of the Institute were as follows: For the General and Income Account Funds, \$12,764.24; for the Associate Fund, \$128,949.07; for the Income from Special Endowment Fund, \$15,113.53; subscriptions to various funds, \$46,632.34; Museum Maintenance Funds, \$110,122.91; Maintenance of the Botanic Garden, \$24,825.40. The total receipts for the year were \$338,407.49 as against \$308,765.86 a year ago, an increase of \$29,641.64.

The appropriation by the City of New York for the maintenance of the Central and Children's Museums for the year 1913 was \$115,332.18, and for the maintenance of the Botanic Garden \$29,480.

To the Botanic Garden were added two strips of land, one on the southerly side of the Prospect Hill Reservoir and one lying between the Reservoir and the Museum site, whereby the Garden is extended to the Eastern Parkway.

Contracts were let by the Department of Parks as follows: (1) For grading and topsoiling the westerly portions of the Botanic Garden at a cost of approximately \$26,500; (2) for the construction of the second or central section of the plant houses, \$28,812; (3) for the construction of the framework, eastern façade and roof of the fourth section of the Central Museum, \$384,482. Work on this fourth section was commenced on April 1, 1913.

The pedimental group of sculptures to be placed over the front portico of the Museum as designed by Mr. DANIEL C. FRENCH and Mr. ADOLPH A. WEINMAN were cut in stone by Messrs. PICCIRILLI BROTHERS during the year, and the candelabra and other bronze work designed by Messrs.

McKIM, MEAD & WHITE, architects, for the front of the Central Museum were placed in position.

The year was also notable for the amount of subscriptions for the enrichment of the Museum collections, the betterment of the Botanic Garden and for the benefit of the general educational work of the Institute, and also for the number and value of the gifts of works of art and of scientific, ethnological and art collections. Among the gifts were 28 paintings purchased from the HENRY T. CHAPMAN collection by the Hon. CHARLES A. SCHIEREN and presented by him to the Institute; 20 paintings by OTTO WALTER BECK, illustrating the Life of Christ, presented by Mr. WILLIAM T. EVANS; 123 pieces of European crockery and silverware presented by the Rev. ALFRED DUANE PELL; a collection of old English stained glass of unusual value, presented by several Trustees and other members of the Institute; landscape paintings by GEORGE INNESS and DEBOCK, presented through subscriptions by members and friends; and a landscape presented by Mr. GEORGE D. PRATT. The additions to the ethnological collections include the results of the expedition made by Mr. STEWART CULIN to the Orient. Additions in the Department of Natural Science were made as results of the expeditions by several members of the Museum staff and through gifts by many citizens.

The first section of the plant houses of the Botanic Garden was completed and work on the first section of the instruction building and the heating plant connected with the Garden was advanced nearly to completion.

## THE GROWTH OF THE INSTITUTE

### I—MEMBERSHIP

June 1, 1888	Number of Members	Annual Increase
	82	
" 1889	352	270
" 1890	1,118	766
" 1891	1,342	224
" 1892	1,782	440
" 1893	2,622	840
" 1894	3,457	835
" 1895	3,764	307
" 1896	4,168	404
" 1897	4,704	536
" 1898	5,417	713
" 1899	5,975	558
" 1900	6,391	416
" 1901	6,836	445
" 1902	7,215	379
" 1903	7,278	63
" 1904	6,974	*304
" 1905	6,897	*77
" 1906	6,347	*550
" 1907	6,552	205
" 1908	6,703	151
" 1909	7,032	329
" 1910	7,001	*31
" 1911	6,902	*99
" 1912	6,926	24
" 1913	6,936	10

\* Decrease.

## II—NUMBER OF LECTURES AND MEETINGS

Open to all Members.

1887-88	18	1900-01	591
1888-89	90	1901-02	562
1889-90	230	1902-03	564
1890-91	310	1903-04	542
1891-92	405	1904-05	473
1892-93	482	1905-06	470
1893-94	489	1906-07	430
1894-95	496	1907-08	488
1895-96	502	1908-09	*682
1896-97	541	1909-10	*599
1897-98	544	1910-11	*596
1898-99	572	1911-12	796
1899-00	593	1912-13	755

\* Including at the Institute Branches, 1908-09, 101; 1909-10, 93; 1910-11, 58; 1911-12, 68; 1912-13, 50.

## III—ATTENDANCE

	Attendance Children's Museum	Attendance Central Museum	Attendance at Lectures, Exhibitions, etc.	Total Attendance for Year
1887-88		6,900	6,900	6,900
1888-89		18,300	18,300	18,300
1889-90		46,950	46,950	46,950
1890-91		99,200	99,200	99,200
1891-92		120,500	120,500	120,500
1892-93		190,900	190,900	190,900
1893-94		212,415	212,415	212,415
1894-95		215,150	215,150	215,150
1895-96		268,580	268,580	268,580
1896-97		302,426	302,426	302,426
1897-98	126,046	334,670	460,716	460,716

## ATTENDANCE—(Cont.)

	Attendance Children's Museum	Attendance Central Museum	Attendance at Lectures, Exhibitions, etc.	Total Attendance for Year
1898-99		92,736	360,980	453,716
1899-00	28,201	101,201	390,225	519,747
1900-01	79,756	110,634	351,736	542,126
1901-02	84,487	113,955	*254,361	452,803
1902-03	110,834	109,395	*255,757	475,986
1903-04	95,738	115,695	*235,587	447,020
1904-05	88,413	107,150	†211,587	407,150
1905-06	93,132	135,523	†190,089	418,744
1906-07	92,996	148,664	†190,595	432,255
1907-08	97,805	194,985	†204,655	497,445
1908-09	125,708	210,703	258,275	594,686
1909-10	133,919	206,850	240,746	581,515
1910-11	152,815	193,690	253,105	599,610
1911-12	163,719	179,739	274,123	*674,435
1912-13	178,969	228,519	287,998	*759,647

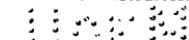
## IV.—INCREASE IN RESOURCES.

	†Receipts	Permanent Funds
1887-88	\$4,456.70	\$37,000.00
1889-90	11,412.25	66,000.00
1890-91	13,218.11	139,000.00
1891-92	18,934.20	206,000.00
1892-93	31,641.51	211,000.00
1893-94	40,169.35	215,000.00
1894-95	44,756.13	218,383.00
1895-96	66,199.73	228,053.00
1896-97	67,983.85	228,453.00

\* There were no important public exhibitions of pictures or other collections outside of the museums in 1901-2, 1902-3 and 1903-4, and thereafter.

† The institute had the use of no Academy of Music Building from November, 1903, until September, 1908.

‡ Includes attendance at the Botanic Garden and the Institute Libraries.



	*Receipts	Permanent Funds
1897-98	99,058.20	232,153.00
1898-99	119,965.12	232,153.00
1899-00	147,096.65	247,153.00
1900-01	197,844.33	256,047.73
1901-02	146,077.52	306,057.73
1902-03	159,958.09	322,447.73
1903-04	162,873.60	336,147.73
1904-05	174,537.35	343,541.14
1905-06	183,332.83	348,541.14
1906-07	197,925.09	378,541.14
1907-08	209,893.63	388,541.14
1908-09	272,001.31	399,554.76
1909-10	289,215.06	449,554.76
1910-11	284,939.53	472,054.76
1911-12	308,765.86	502,354.76
1912-13	338,407.49	505,807.18

\* The receipts recorded here include only moneys available for the payment of current expenses and the purchases of objects for the Museum, but do not include additions to the Permanent Funds nor sales of securities for reinvestment.

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## CONSTITUTION

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### ARTICLE I—MEMBERSHIP

SECTION I. The membership of the BROOKLYN INSTITUTE OF ARTS AND SCIENCES shall comprise HONORARY MEMBERS, FOUNDERS, BENEFACTORS, FELLOWS, PATRONS, PERMANENT MEMBERS, LIFE MEMBERS, CORRESPONDING MEMBERS, SUSTAINING MEMBERS, SUBSCRIBING MEMBERS and ASSOCIATE MEMBERS.

SEC. II. The HONORARY MEMBERS shall comprise those persons who have rendered distinguished and valuable service to man by their creations, contributions, discoveries or inventions in the Arts and Sciences. The number of Honorary Members shall be limited to fifty.

SEC. III. The FOUNDERS OF THE INSTITUTE shall comprise those persons who subscribe to the funds of the Institute a sum not less than five hundred thousand dollars, or who present to the Institute sculptures, paintings, books, models, collections in science, apparatus or other property which shall be estimated by the Board of Trustees to be worth to the Institute not less than five hundred thousand dollars. So far as practicable the several Museums of the Corporation shall be dedicated to the philanthropy of the FOUNDERS and shall bear their names.

SEC. IV. The BENEFACTORS OF THE INSTITUTE shall comprise those persons who subscribe to the funds of the Institute a sum not less than one hundred thousand dollars and not exceeding five hundred thousand dollars, or who present to the Institute property which shall be estimated by the Board of Trustees to be worth to the Institute between one hundred thousand and five hundred thousand dollars. As far as practicable the several

galleries of Arts and Sciences, the Libraries, Observatories, or other well-defined portions of the property of the Corporation shall be dedicated to the philanthropy of the **BENEFACTORS**, and shall bear their names.

**SEC. V.** The **FELLOWS OF THE INSTITUTE** shall comprise those Associate Members of the Institute who have rendered distinguished and valuable services to man, either by their productions, contributions, discoveries or inventions in the Arts and Sciences, or by their long and eminent services as teachers of Art or Science.

**SEC. VI.** The **PATRONS OF THE INSTITUTE** shall comprise those persons who subscribe to the funds of the Institute a sum not less than ten thousand and not exceeding one hundred thousand dollars, or who present to the Institute property which shall be estimated by the Board of Trustees to be worth to the Institute not less than ten thousand nor more than one hundred thousand dollars. As far as practicable the property given by the **PATRONS** shall be so arranged as to testify to their philanthropy.

**SEC. VII.** The **PERMANENT MEMBERS OF THE INSTITUTE** shall comprise those persons who contribute to the Institute funds a sum not less than one thousand nor more than ten thousand dollars, or who present to the Institute in any one year property which shall be estimated by the Board of Trustees to be worth to the Institute not less than one thousand nor more than ten thousand dollars. **PERMANENT MEMBERS** shall be entitled to transfer their memberships respectively by will or by other legal process.

**SEC. VIII.** The **LIFE MEMBERS OF THE INSTITUTE** shall comprise those persons who contribute to the funds of the Institute a sum not less than one hundred nor more than one thousand dollars, or who present to the Institute

at any one time property which shall be estimated by the Board of Trustees to be worth to the Institute not less than one hundred nor more than one thousand dollars.

**SEC. IX.** The **CORRESPONDING MEMBERS OF THE INSTITUTE** shall comprise those persons whose knowledge in the Arts and Sciences qualifies them to contribute special and valuable information to the proceedings of the Institute or of its several departments, and who do not reside within a radius of twenty miles of the City of Brooklyn.

**SEC. X.** The **ASSOCIATE MEMBERS OF THE INSTITUTE** shall comprise persons who are specially interested in one or more of the Arts or Sciences. The Founders, Benefactors, Patrons, Permanent Members and Life Members of the Institute shall be regarded as Associate Members, and shall not be subject to the payment of any fees or dues. All other Associate Members shall contribute to the funds of the Institute an Initiation Fee of five dollars and Annual Dues of five dollars, and after October 1, 1908, the Annual Dues shall be six dollars, payable in advance. An Associate Member shall be entitled, without additional expense, to become a member of as many departments of the Institute as he may elect, to attend all the lectures and meetings of the Institute and of its several departments, and to enjoy all the privileges for education afforded by the Museums, Lectures, Libraries and other appointments of the Institute, with the exception of the instruction given in the several schools conducted by the departments—the Concerts, Dramatic Readings, Special Meetings authorized by the Council, and the Institute Extension Courses of Lectures—for which a special fee for admission may be charged. Associate Members who contribute ten dollars as annual dues shall be known as Subscribing Members, and Associate Members who contribute twenty-five dollars as annual dues shall be known as Sustaining Members. The privileges

of Subscribing Members shall include free admission to the Museum on pay days and to the Botanic Garden Buildings at all times when the buildings are in use. Sustaining Members shall further be entitled to receive all publications issued from the Museum and from the Botanic Garden free of charge.

SEC. XI. The Founders, Benefactors, Patrons, Permanent Members and Life Members of the Institute shall also be known as the **CORPORATE MEMBERS OF THE BROOKLYN INSTITUTE OF ARTS AND SCIENCES**. Each Corporate Member shall be entitled to vote in the election of Trustees of the Institute, and shall be eligible to election as a member of the Board of Trustees. The Corporate powers of the Institute shall be vested in the Corporate Members. Twenty-five Corporate Members shall constitute a quorum for the transaction of business.

SEC. XII. Honorary Members, Fellows, Corresponding Members and Associate Members shall be nominated by the Council of the Institute and elected by the Board of Trustees. A two-thirds vote shall be necessary for the nomination and election of persons to the classes of membership named in this section.

SEC. XIII. The Board of Trustees shall have power to admit any institution and its members, on such terms as the Board shall deem just and proper.

#### **ARTICLE II—BOARD OF TRUSTEES**

SECTION I. The Board of Trustees shall comprise fifty Corporate Members of the Institute. The Trustees named in the Act of Incorporation shall divide their number into five classes to be drawn by lot. The first class shall hold office for one year, the second class for two years, the third class for three years, the fourth class for four years, and the fifth class for five years, succeeding the second Friday in

May, 1890. On the second Monday in January of each year ten Trustees shall be elected, who shall hold office for five years, from the second Friday of the May following, or until their successors are elected. The polls shall be open from five until six o'clock P. M. on the day of election.

SEC. II. The officers of the Board shall be a President, three Vice-Presidents, a Treasurer, and a Secretary. They shall be elected by the Board of Trustees on the second Friday in May, each year, and shall hold office for one year, or until their successors are elected.

SEC. III. The Board of Trustees shall have power to fill vacancies in the Board or its offices, and to declare the seat of any member vacant who shall have failed to attend three successive meetings of the Board, unless written excuse satisfactory to the Board shall have been presented.

SEC. IV. The regular meetings of the Board shall be held on the second Friday of each month, except the months of July, August and September, at such hour as the Board from time to time may appoint, written notices for which shall be mailed to each member.

SEC. V. It shall be the duty of the President to preside at the meetings of the Trustees, the Corporation and the Institute, and to present to the Trustees an Annual Report at the regular meeting in May. In the absence of the President, the first Vice-President in order, who is present, shall act in the place of the President.

SEC. VI. It shall be the duty of the Treasurer to take charge of the seal, money, funds and securities of the Association; to collect all accounts and sums of money due and payable to the Institute; to pay all bills and accounts when duly audited; to keep a record of all the financial transactions of the Institute, and to report the same to the Board of Trustees as often as required.

SEC. VII. The Board of Trustees shall elect a Director, who, subject to the direction of said Board, and the several Committees of the Board, shall have charge of the Museums and Libraries of the Corporation; shall execute the wishes of the Board and of its several Committees; shall have general charge and supervision of the educational work of the Institute; shall labor for the best interests of the Corporation and report to the Board as often as it shall require concerning the work and needs of the Institute.

SEC. VIII. It shall be the duty of the Secretary to make and keep a record of the proceedings of the Board of Trustees; to send notices of all meetings of the Board; to notify all persons of their election as Trustees and officers, and to make an Annual Report to the Trustees in the month of May on the progress of the Institute.

SEC. IX. The Secretary shall call special meetings of the Board at the written request of the President, or of any ten Trustees.

SEC. X. All elections shall be by ballot. A majority of the votes cast shall be necessary to an election.

### ARTICLE III—COMMITTEE OF THE CORPORATION

SECTION I. The President shall appoint annually in the month of May the following Standing Committees of five or more members each:

- 1 COMMITTEE OF WAYS AND MEANS
- 2 COMMITTEE ON ART MUSEUMS
- 3 COMMITTEE ON MUSEUMS OF SCIENCE
- 4 COMMITTEE ON ETHNOLOGY
- 5 COMMITTEE ON LIBRARIES
- 6 COMMITTEE ON LECTURES

- 7 COMMITTEE ON EDUCATION
- 8 COMMITTEE ON MUSIC
- 9 COMMITTEE ON BOTANIC GARDEN AND ARBORETUM
- 10 COMMITTEE ON ASTRONOMICAL OBSERVATORY
- 11 COMMITTEE ON MEMBERSHIP

The President and Treasurer shall be *ex-officio* members of each of the Standing Committees.

SEC. II. The President, Treasurer and Secretary of the Board, together with the Chairmen of the Standing Committees, shall constitute the EXECUTIVE COMMITTEE of the Board of Trustees. The President and Secretary of said Board shall be respectively the President and Secretary of the Executive Committee.

SEC. III. The EXECUTIVE COMMITTEE shall, under the direction of the Board of Trustees, have the general care of the Institute Buildings, make necessary repairs, regulate the use of the buildings and the collections by the public; shall have charge of making all contracts on behalf of the Board of Trustees; shall have power to audit all bills against the Institute, and, in general, execute the will of the Board in all matters not specially delegated to other committees or persons. During the months of July, August and September, when the Board of Trustees has no regular sessions, the Executive Committee shall have authority, in such manner as it shall determine, to act on behalf of the Board of Trustees.

SEC. IV. The COMMITTEE OF WAYS AND MEANS shall, under the direction of the Board of Trustees, have charge of the collection, increase and investment of the endowment and permanent funds of the Institute, and shall have general charge of the financial interests of the Corporation.

SEC. V. The COMMITTEE ON ART MUSEUMS, under the direction of the Board of Trustees, shall have the general charge of the art collections of the Institute and the exhibition of the same; shall effect the purchase, loan or sale of all works of art on behalf of the Institute; and, in general, shall endeavor to increase and improve the art collections of the Corporation.

SEC. VI. The COMMITTEE ON MUSEUMS OF SCIENCE, under the direction of the Board of Trustees, shall have general charge of the scientific collections of the Museums and their exhibition; shall effect the purchase, loan or sale of all collections illustrating the sciences, on behalf of the Institute; and, in general, shall endeavor to increase and improve the collections and the facilities of the Institute for scientific research.

SEC. VII. The COMMITTEE ON ETHNOLOGY, under the direction of the Board of Trustees, shall have general charge of the ethnological collections of the Museum and their exhibition; shall endeavor to increase and improve the collections in Ethnology, and provide facilities for ethnological research.

SEC. VIII. THE COMMITTEE ON LIBRARIES, under the direction of the Board of Trustees, shall have general charge of the Libraries of the Institute and their arrangement and use; shall effect the purchase, loan or sale of all books, pamphlets or other materials properly belonging to the Libraries, on behalf of the Corporation; and, in general, shall endeavor to increase and improve the Libraries of the Institute, and their usefulness to all who have access to them.

SEC. IX. The COMMITTEE ON LECTURES, under the direction of the Board of Trustees, shall have general charge of the courses of lectures given under the auspices of the Institute.

SEC. X. The COMMITTEE ON EDUCATION, under the direction of the Board of Trustees, shall have general charge of the work undertaken by the Institute for the benefit of those citizens, schools and higher institutions of learning in the city that seek to avail themselves of the opportunities afforded by the Institute for systematic instruction, investigation, production or research.

SEC. XI. The COMMITTEE ON MUSIC, under the direction of the Board of Trustees, shall have general supervision of the concerts and musical instruction given under the auspices of the Institute.

SEC. XII. The COMMITTEE ON BOTANIC GARDEN AND ARBORETUM, under the direction of the Board of Trustees, shall have general supervision of the grounds adjacent to the Museum Building and of any Botanic Garden or Arboretum that may be located on such lands.

SEC. XIII. The COMMITTEE ON ASTRONOMICAL OBSERVATORY, under the direction of the Board of Trustees, shall have supervision of the Astronomical Observatory and of the scientific and educational work conducted in connection therewith.

SEC. XIV. The COMMITTEE ON MEMBERSHIP, under the direction of the Board of Trustees, shall have charge of the admission of members, and the general increase of the membership of the Institute.

SEC. XV. The Committees named in this article shall make a report to the Board of Trustees at each regular meeting.

#### ARTICLE IV—THE ASSOCIATE MEMBERS

SECTION I. The active educational work of the Institute in the Arts and Sciences shall be conducted by the GENERAL BODY OF ASSOCIATE MEMBERS, and the several Departments organized by them, under the authority of the Trustees.

SEC. II. The officers of the General Body of Associate Members shall be a President, a Vice-President from each Department, a Treasurer, and a Secretary. The foregoing officers, together with the President of the Board of Trustees and the Director of the Institute, shall constitute the Council of the Institute.

SEC. III. The following Departments composed of the Associate Members of the Institute may be formed: **AGRICULTURE, ANTHROPOLOGY, ARCHAEOLOGY, ARCHITECTURE, ASTRONOMY, BOTANY, CHEMISTRY, DOMESTIC SCIENCE, DRAMATIC ART, ELECTRICITY, ENGINEERING, ENTOMOLOGY, ETHNOLOGY, FINE ARTS, GEOGRAPHY, GEOLOGY, LAW, MATHEMATICS, MICROSCOPY, MINERALOGY, MUSIC, PAINTING, PEDAGOGY, PHILOLOGY, PHILOSOPHY, PHOTOGRAPHY, PHYSICS, POLITICAL SCIENCE, PSYCHOLOGY, SCULPTURE, SOCIOLOGY, and ZÖOLOGY.**

SEC. IV. The officers of each Department shall be a President, a Vice-President, and a Secretary. Such additional officers, constitution, by-laws or rules and regulations as are required by any Department in the accomplishment of its work, and are not provided by the general organization of the Institute, shall be provided by the Department itself. The President of a Department shall be a Vice-President of the General Body of Associate Members.

SEC. V. The Annual Meeting of the Associate Members shall be held on the Tuesday following the first Saturday in May. The Annual Meetings of the various departments of Associate Members shall be held in April. All other meetings of the departments shall be arranged by the departments themselves.

SEC. VI. The regular meetings of the Council shall be on the first Monday in each month, omitting July, August and September. The regular meeting in May shall also be

the Annual Meeting of the Council. At its Annual Meeting the Council shall elect its President, Treasurer and Secretary, who shall be also respectively the President, Treasurer and Secretary of the Associate Members.

SEC. VII. It shall be one of the duties of the President of the Associate Members to present at their Annual Meeting, or at the close of his term of office, an address, which shall include a review of the present condition of some Department of the Arts and Sciences. This address shall be incorporated in the proceedings of the Institute.

SEC. VIII. The Council shall recommend to the Board of Trustees measures that will facilitate the general work of the Institute and of its various Departments in the Arts and Sciences, and shall have the direction of the general work of the body of Associate Members.

SEC. IX. The Council shall appoint at its regular meeting in May the following Standing Committees of five members each:

- 1 COMMITTEE ON LECTURES AND MEETINGS
- 2 COMMITTEE ON PUBLICATIONS
- 3 COMMITTEE ON MEMBERSHIP
- 4 COMMITTEE ON APPARATUS
- 5 COMMITTEE ON SCIENTIFIC WORK
- 6 COMMITTEE ON FINE ARTS

The President and Secretary of the Council shall be *ex-officio* members of the Standing Committees.

SEC. X. Propositions for Associate Membership and Corresponding Membership shall be presented to the Council. Persons already Associate Members or Corresponding Members may be elected members of any Department by the Department itself. The President of the Board of Trustees, the Director of the Institute, and the

President and Secretary of the Associate Members, shall be *ex-officio* members of each Department of the Institute.

SEC. XI. It shall be the duty of each Department of Associate Members to make an annual report in the month of May to the Board of Trustees and to the Council of Associate Members on the work, the needs, the membership, and the attendance of the Department.

#### ARTICLE V—COLLECTIONS AND FUNDS

SECTION I. The Board of Trustees shall empower the departments of the Institute to make, classify, preserve and exhibit the collections in the Departments of the Arts and Sciences belonging to their respective branches. Collections shall be admitted to the Museum and Libraries when they shall have been approved by a Committee of Experts appointed by the Department or Departments immediately concerned, and when approved by the Board of Trustees.

SEC. II. The Annual Dues received from the Associate Members shall be apportioned by the Trustees, on recommendation of the Council, among the various Departments of Associate Members, due regard being had for the number of members, the average attendance, the amount and character of the work done and the needs of each Department. All other moneys received by the Institute shall be placed to the credit of the General Fund of the Institute, unless otherwise designated by the Board of Trustees, or by the person or estate from which they are received.

#### ARTICLE VI—AMENDMENTS

This Constitution may be amended by the concurrent vote of the Board of Trustees and the Council, at regular meetings of the same, provided written notice of the proposed amendment is mailed to each member of the respective bodies at least four days before their respective meetings.

## BY-LAWS OF THE BOARD OF TRUSTEES

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SECTION I. The Order of Business at the meetings of the Board of Trustees shall be as follows:

- 1 Reading of Minutes
- 2 Communications
- 3 Report of Treasurer
- 4 Report of Director
- 5 Report of Curator-in-Chief
- 6 Report of Executive Committee
- 7 Report of Standing Committees
- 8 Report of Special Committees
- 9 Election of Officers or Members
- 10 Unfinished Business
- 11 Motions and Miscellaneous Business

This order may be suspended by vote of the Board at any meeting.

SEC. II. All bills against the Institute, whether for its educational work or for its Museums, shall be contracted only under the authority of the Board, and shall be presented to the Executive Committee to be audited. Whenever any bill against the Institute has been so audited, the Treasurer is authorized to pay the same.

SEC. III. The Treasurer shall make a monthly report of the finances of the Institute, and an annual report at the regular meeting in May.

SEC. IV. The Board of Trustees may elect an auditor, to hold office during the pleasure of the Board, whose duty it shall be to audit the accounts of the Treasurer, and who

shall report thereon from time to time as the Treasurer may require or as the Executive Committee may direct. The compensation to be paid such auditor shall be fixed by the Executive Committee subject to the approval of the Board of Trustees.

SEC. V. The Director shall present a report of the work done by the Institute in each succeeding month, and an annual report of the work of the Institute at the regular meeting of the Board in the month of May.

SEC. VI. The Executive Committee shall present monthly reports at the regular meetings of the Board, and shall present an annual report at the regular meeting in May.

SEC. VII. The President, Treasurer, Director and Secretary may incur petty expenses in the discharge of their duties, the sum of which shall not exceed One Hundred Dollars, in each case, in any given month.

SEC. VIII. The Director shall give as much of his time to the Institute and its interests as the Board of Trustees shall demand, and shall receive compensation therefor. The compensation shall be fixed each year by the Trustees.

SEC. IX. These By-Laws may be amended at any regular meeting of the Board, provided notice of the proposed amendments is mailed to each member of the Board, at least four days previous to the meeting.

## WORK OF THE YEAR

1912-1913

## ANNIVERSARY MEETINGS AND ADDRESSES

## I. FIRST GENERAL MEETING.

The First General Meeting of the Members of the Institute was held in the Music Hall, Academy of Music, on Wednesday evening, December 11. President JOHN GRIER HIBBEN, LL.D., of Princeton University, delivered an Address on "The Functions of the University in our American Commonwealth." FRANKLIN W. HOOPER, M.A., LL.D., Director of the Institute, presided. WILLIAM FAIRLEY, Ph.D., of the Commercial High School, spoke in appreciation of the address. An informal reception to President HIBBEN followed the meeting.

## II. SECOND GENERAL MEETING.

Joint Meeting of the NEW YORK PEACE SOCIETY and the BROOKLYN INSTITUTE OF ARTS AND SCIENCES, in the Opera House, Academy of Music, on Sunday afternoon, January 12. General Subject: "America and the Movement of International Peace." Addresses were delivered by the Hon. SETH LOW, LL.D., President of the Meeting, on "America's Opportunity for Leadership Towards World Peace"; Rev. S. PARKES CADMAN, D.D., on "The Spirit of Militarism as Related to America's Influence in Europe"; Rabbi STEPHEN S. WISE, on "America and the New International Ideals"; Dr. TALCOTT WILLIAMS, on "The World's Open Waterways"; Hon. JOHN M. SLAYDEN, M.C., of Texas, on "The Panama Canal Law a Menace to International Peace."

### III. ABRAHAM LINCOLN ANNIVERSARY

The Third General Meeting of the Members of the Institute was held in the Music Hall, Academy of Music, on Monday evening, February 10. Hon. CHARLES A. TOWNE, Ex-Senator of the United States from Minnesota, delivered a Memorial Address on Abraham Lincoln. FRANKLIN W. HOOPER, M.A., LL.D., Director of the Institute, presided.

### IV. GRAHAM FOUNDATION LECTURES

A Series of Six Addresses on "Emerson and Carlyle" were delivered by Prof. BLISS PERRY, L.H.D., LL.D., of Harvard University, on Sunday afternoons, at four o'clock, in the Music Hall, Academy of Music.

- Nov. 17—"The Making of Carlyle."
- Nov. 24—"The Making of Emerson."
- Dec. 1—"Carlyle's Message to his Age."
- Dec. 8—"Emerson's Message to his Age."
- Dec. 15—"Carlyle for Today."
- Dec. 22—"Emerson for Today."

### V. CLOSING GENERAL MEETING OF THE SEASON

Joint meeting of the Members of the Institute and the ADELPHI COLLEGE ASSOCIATES in the Lecture Hall, Academy of Music, Monday evening, May 12. Address by President JOHN H. FINLEY, of the College of the City of New York, on "Higher Education in New York City." Brief Addresses by Hon. WILLIAM McCARROLL, President of the Adelphi College Associates; Hon. CHARLES H. FULLER, President of the Brooklyn League; Prof. JOHN F. COAR, Ph.D., of Adelphi College; Prin. WILLIAM L. FELTER, LL.D., of the Girls' High School and FRANKLIN W. HOOPER, M.A., LL.D., Director of the Institute.

## VI. GENERAL EXHIBITIONS

A. LOAN EXHIBITIONS OF PAINTINGS AND OTHER WORKS OF ART were continued throughout the year in the galleries of the Museum Building in conjunction with the permanent exhibition of the Institute Collections of Paintings and other works of Art.

B. DEPARTMENT OF PHOTOGRAPHY. Loan Exhibitions in the Studio Rooms, Academy of Music.

Oct. 21—By ALVIN LANGDON COBURN, of London and New York.

Nov. 11—Exhibit by members of the Beginners Class in Photography of Columbia University.

Nov. 18 and 25—By Miss GERTRUDE KASEBIER, of New York.

Dec. 2—By AUGUSTUS THIBAUDEAU, of Niagara Falls.

Dec. 9—By ELIAS GOLDENSKY, of Philadelphia.

Dec. 13—By the Brooklyn Academy of Photography. Exhibition of lantern slides.

Dec. 16 and 23—By CHARLES B. DENNY.

Dec. 30, Jan. 3 and 6—By KARL STRUSS.

Jan. 13 and 20—By RICHARD M. COIT, JOSEPH R. COOPER and WILLIAM E. MACNAUGHTAN.

Jan. 27 and Feb. 3—By CLARENCE H. WHITE.

Feb. 10—By EDWARD H. DICKSON.

Feb. 17 and 24—By Mrs. BOSTWICK and Miss WHITTEMORE.

Mar. 3 and 10—By PAUL LEWIS ANDERSON.

Mar. 31—Exhibition by Members of the Brooklyn Institute Class under the direction of W. H. ZERBE.

C. EXHIBITION OF ENLARGED AND COLORED PHOTOGRAPHS OF "OUR NATIONAL PARKS," November 13th to 30th, Week Days 9 A. M. to 9 P. M., Sundays 2 to 5 P. M. Art Building, 174 Montague Street. The pictures in this collection represented some of the characteristic and

striking scenes in the larger national parks. The colored pictures were all photographs that have been colored in oil under the personal direction of the photographers.

D. DEPARTMENT OF MICROSCOPY. An Exhibition of recently mounted slides of specimens was held in the Science Room, Academy of Music, on Friday evening, November 15.

E. The DEPARTMENT OF MICROSCOPY held its TWENTY-SIXTH ANNUAL EXHIBITION at the Art Building, 174 Montague Street, Friday and Saturday, March 7 and 8, from 8 to 11 o'clock. A full account of the Exhibition will be found under the Department of Microscopy.

F. THE DEPARTMENT OF PHOTOGRAPHY held its TWENTY-THIRD ANNUAL EXHIBITION OF PHOTOGRAPHIC PRINTS in the Art Building, 174 Montague Street, from Saturday, April 19 to Wednesday, April 30, inclusive. A catalogue of the Exhibition was printed containing one hundred and twenty-three titles of exhibits. A full account of the Exhibition will be found under the Department of Photography.

G. The main collections in ARCHITECTURE, BOTANY, ENTOMOLOGY, ETHNOLOGY, GEOGRAPHY, GEOLOGY, MINERALOGY, SCULPTURE and ZOOLOGY have been on permanent exhibition at the Central Museum Building on Eastern Parkway, and have been open and free to the public from 9 A. M. to 6 P. M. on Wednesday, Thursday, Friday and Saturday of each week, and on all legal holidays except Sunday; also on Thursday of each week from 7.30 to 9.45 P. M., and on Sundays from 2.00 to 6.00 P. M. The collections have been open to the public on Monday and Tuesday of each week, from 9 A. M. until 6 P. M., by the payment of twenty-five cents for adults and ten cents for children under sixteen years.

Classes of students (from public and private schools) accompanied by their teachers are admitted to the Museum on Mondays and Tuesdays without admission fee.

## WORK OF THE DEPARTMENTS

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### THE DEPARTMENT OF AGRICULTURE.

#### *Officers for 1913-1914*

Prof. CLAYTON A. PETERS, M.Sc.	<i>President</i>
W. B. MONTGOMERY	<i>First Vice-President</i>
GAGE E. TARBELL	<i>Second Vice-President</i>
Miss MARY L. PALMER	<i>Secretary</i>

#### *Executive Committee*

Prof. CLAYTON A. PETERS, M.Sc.	Mrs. CLAYTON A. PETERS, Ph.B.
W. B. MONTGOMERY	Hon. WILLIAM M. CALDER
GAGE E. TARBELL	Mrs. E. S. HYDE
Miss MARY L. PALMER	Mrs. J. H. HARNDEN
Prof. EDGAR W. OLIVE	Mrs. W. E. DUNN
Mrs. C. H. BURDETT	WILLIAM MUNRO

The Department was organized on March 11, 1912, with ten members. The present membership is twenty-seven. The work of the Department has been as follows:

I. Three Illustrated Lectures on "Forestry and Arboriculture," by HENRY HICKS, B.S., of Westbury, L. I.

Jan. 28—"An Analysis of the Natural Conditions Controlling Tree Growth in the Vicinity of New York."

Feb. 4—"What should be Done in Developing a Country Place."

Feb. 11—"Some of the Unnatural Conditions for Trees on Lawns, City Parks and Streets."

II. Four Illustrated Lectures on "Fruit Raising," by Prof. C. S. WILSON, B.S., of the State College of Agriculture, Ithaca, N. Y.

Apr. 4—"Budding and Grafting."

Apr. 11—"Varieties of Fruit for Commercial Planting, and for the Home Orchard and Garden."

Apr. 18—"Pruning."

Apr. 25—"Methods of Managing Orchards."

III. Four Illustrated Lectures on "Soils and Soil Management," by Prof. O. S. MORGAN, M.S.A., Ph.D., of Columbia University.

May 2—"Mechanical Characteristics of Common Soil Types."

May 9—"Soils of Long Island."

May 16—"The Humus Factor in Soil Management."

May 23—"Commercial Fertilizers and Their Proper Place in Soil Management."

IV. Feb. 15—Address by the Hon. CALVIN J. HUSON, New York State Commissioner of Agriculture. Subject: "The Development of the Agricultural Interests of the State of New York." Address by Prof. FRANKLIN W. HOOPER, M.A., LL.D., Subject: The "New York State School of Agriculture on Long Island."

V. Visits to Agricultural Institutions, Plantations and Experiment Stations.

Sept. 21—Visit to the Experiment Station and Demonstration Farm of the Long Island Railroad, H. B. FULLERTON, Director, at Medford, L. I.

Sept. 28—Visit to Flowerfield, L. I., JOHN LEWIS CHILDS, Proprietor.

Oct. 5—Visit to Westbury, L. I., Plantation of ISAAC HICKS & SON.

Oct. 12—Visit to the New Jersey Agricultural College Experiment Station, New Brunswick, N. J., JACOB G. LIPMAN, Director.

June 7—Visit to Cottage Gardens at Queens, L. I., CHARLES W. WARD, Proprietor.

June 14—Visit to Floral Park Plantation, Floral Park, L. I., JOHN LEWIS CHILDS, Proprietor.

June 21—Visit to the Arden Farms of Mrs. E. H. HARRIMAN, at Arden, N. Y.

## DEPARTMENT OF ARCHITECTURE

*Officers for 1913-1914*

ARNE DEHLI

*President*

J. MONROE HEWLETT, Ph.B.

*Vice-President*

WOODRUFF LEEMING

*Secretary*

*Executive Committee*

J. MONROE HEWLETT, Ph.B.

WOODRUFF LEEMING, B.Sc.

RAYMOND F. ALMIRALL

DANIEL G. MALCOLM, Jr.

PETER I. COLLINS

WILLIAM R. MEAD

HENRY M. CONGDON, M.A.

GEORGE L. MORSE

HERBERT W. CONGDON, M.A.

GEORGE T. MORSE

RUDOLPH L. DAUS

A. MILTON NAPIER

ARNE DEHLI

JOHN J. PETTIT

Prof. WILLIAM H. GOODYEAR, M.A.

FRANK H. QUINBY

Rev. WILLIAM H. INGERSOLL

HUGH TALLANT

GEORGE M. LAWTON

WILLIAM M. KENDALL

BURT L. FENNER

ALFRED J. S. HOLTON

WILLIAM P. BANNISTER

CHARLES S. PEABODY

Prof. AUSTIN W. LORD

STEPHEN W. DODGE

The Department of Architecture was organized on December 13, 1889, with a membership of one hundred and eight. The present membership is one hundred and ninety-four.

The work of the Department has been as follows:

I. Five Illustrated Lectures on "Colonial Architecture in New England," by Prof. H. LANGFORD WARREN, M.A., of Harvard University. Wednesday evenings.

Jan. 15—"Colonial Building in the Sixteenth Century and its English Prototypes."

Jan. 22—"Colonial Houses in the Eighteenth Century."

Jan. 29—"Sir Christopher Wren and his Influence on Church Building in New England."

Feb. 5—"Salem as an Illustration of the Colonial Town."

Feb. 12—"Charles Bulfinch and the Sequel of Colonial Architecture."

II. Six Illustrated Lectures on "Art and Architecture of Spain," by Prof. CHARLES UPSON CLARK, Ph.D., of Yale University. Tuesday afternoons.

Apr. 1—"Iberian Art; the Romans in Spain."

Apr. 8—"Medieval Spanish Art; the MS. Miniatures."

Apr. 15—"Moorish Art in Spain; the Alhambra."

Apr. 22—"The Christian Revival in Spain; the Great Cathedrals."

Apr. 29—"The Development of Spanish Painting under Flemish and Italian Influences; the Titians and Raphaels in the Prado."

May 6—"The Great Spanish Masters; Ribera, el Greco, Murillo, Velasquez, Goya.

III. Four Illustrated Lectures on "Architectural Refinements," by Prof. WILLIAM H. GOODYEAR, M.A., Curator of Fine Arts, Institute Museum. Wednesday evenings.

Apr. 9—"Greek Refinements."

Apr. 16—"The Pisa Cathedral."

Apr. 23—"Mediæval Architectural Refinements."

Apr. 30—"Notre-Dame."

IV. Six Illustrated Lectures on "Northern France; its Beauty, Romance and Art," by ARTHUR STANLEY RIGGS, F.R.G.S., of New York. Wednesday afternoons, beginning November 13. For subjects of these lectures see Department of Geography.

V. Six Illustrated Lectures on "Italian Cities and Towns," by Prof. BRUNO ROSELLI, Ph.D., of Adelphi Col-

lege. Thursday afternoons, beginning April 17. For subjects of these lectures see Department of Fine Arts.

VI. Single Illustrated Lecture by EDWARD H. BENNETT, of Chicago. Subject: "City Planning."

### VII. EXHIBITIONS

The EXHIBITION OF THE COLLECTION OF ENLARGED PHOTOGRAPHS OF ANCIENT AND MEDIEVAL ITALIAN ARCHITECTURE AND SCULPTURE, made by Prof. WILLIAM H. GOODYEAR, M.A., with the assistance of Mr. JOHN W. McKECKNIE, of New York, in 1895, was continued, in part on the walls in the Central Museum Building. This collection comprises some two hundred and twenty photographs, many of which illustrate asymmetry in architecture. Enlarged photographs from the Italian Survey of 1901 and from the French Survey of 1903 were added to this collection during 1903-1904; and from the French Survey of 1905, during the year 1907-1908 and in 1910-1911.

The COLLECTION OF PHOTOGRAPHS OF ARCHITECTURAL SUBJECTS, comprising upwards of four thousand pictures, has been mounted on cardboards, labeled and arranged in portfolio cabinets.

The ART GALLERIES of the Museum Building contain collections illustrating Greek, Roman and Modern Architecture, Egyptian, Greek and Roman Antiques, Modern Italian and Oriental Ceramics, Oriental Cloisonnes. The work of making these collections is a most important one, and commands the interest and co-operation of every friend of Art Education and of every Member of the Institute who is a lover of Art.

An excellent beginning was made during the season of 1897-1898 in the Collections of Casts in Sculpture and Architecture, under the supervision of Mr. GEORGE C.

BRACKETT, Secretary of the Board of Trustees. The completion of the second section of the Museum Building made room for additions to these collections.

## DEPARTMENT OF ASTRONOMY

*Officers for 1913-1914*

ALBERT J. BROOKS	<i>President</i>
GARRETT P. SERVISS, B.Sc.	<i>Vice-President</i>
Rev. FREDERIC CAMPBELL, M.A., D.Sc.	<i>Second Vice-President</i>
B. G. WAY	<i>Secretary</i>
Miss. A. LOUISE M. GILBERT	<i>Librarian</i>

### *Executive Committee*

ALBERT J. BROOKS	STEPHEN LOINES
Rev. FREDERIC CAMPBELL, M.A., D.Sc.	MISS ANTONIA C. MAURY
GARRETT P. SERVISS, B.Sc.	B. G. WAY
Prof. S. ALFRED MITCHELL, Ph.D.	WALLACE GOOLD LEVISON, B.Sc.
STANSBURY HAGAR, B.A.	COL. EDWARD B. DICKINSON
MISS MARY M. HOPKINS, B.A.	MISS EDITH B. BRAINERD
MISS JENNIE A. TAYLOR	MISS A. LOUISE M. GILBERT
	VICTOR W. CROSSMAN, M.D.

The Department was organized on May 10, 1888, by the Members of the American Astronomical Society residing in New York, Brooklyn and the neighboring towns, and began its work as a Department with thirty-two members. The present membership is two hundred and fifty-nine.

The work of the Department has been as follows:

I. Three Illustrated Lectures by B. R. BAUMGARDT, of Los Angeles, California. Friday evenings.

Jan. 3—"The Solar System."

Jan. 10—"An Evening with the Stars."

Jan. 17—"Comets and Nebulæ."

II. Five Illustrated Conferences on "Mathematical Astronomy," by GARRETT P. SERVISS, B.S., Vice-President of the Department. Friday evenings.

Feb. 7—"The Orbits and Revolutions of Members of the Solar System."

Feb. 14—"The Velocities of Different Astronomical Bodies."

Feb. 21—"The Velocity of Light and its Relations."

Feb. 28—"The Force of Gravity on Different Astronomical Bodies."

Mar. 7—"The Shape of Our Universe."

III. Four Conferences in the Science Room on Saturday evenings under the auspices of the Natural Science Committee, JOHN J. SCHOONHOVEN, M.A., Chairman.

Oct. 26—ALBERT J. BROOKS, President of the Department of Astronomy. Subject: "Motions of the Stars."

Nov. 23—B. G. WAY, Secretary of the Department of Astronomy. Subject: "Orbits of the Planets."

Mar. 1—Miss ANTONIA C. MAURY, Member of the Executive Committee. Subject: "Variability and Revolution."

Apr. 19—GARRETT P. SERVISS, B.S. Subject: "The Moon. Is it a Dead World?"

IV. The TEMPORARY OBSERVATORY of the Department now located at the Academy of Music was advertised to be open on thirty-six evenings during the months from October until June inclusive, for the observation of the Moon in its various phases; the planets, Venus, Mars, Jupiter and his four Satellites, Saturn and his system of Rings; Double Stars, Colored Stars, Star Clusters, Nebulæ, etc., etc. One of the telescopes bequeathed to the Institute by the late WILLIAM F. SEBERT was placed in the Adelphi College observatory in January, 1905, and moved to the Academy in September, 1908. The meetings have been alternately conducted by ALBERT J. BROOKS, President of the Department, and B. G. WAY, Secretary of the Department. Twenty-two of the designated evenings were

pleasant and the total attendance was five hundred and eighty-eight.

IV. The MAGAZINE CLUB, B. G. WAY, Chairman, during the past year has circulated among the Members of the Department the following magazines: "Popular Astronomy," "Knowledge" and the "Journal of the British Astronomical Association." The subscriptions have been covered by the fee of \$1.00 per year from each Member. This Club is open to all Members of the Department.

V. A PERMANENT OBSERVATORY. At the June meeting of the Trustees in 1905, a communication was received from ALFRED T. WHITE a Member of the Board, who was unable to be present at the meeting, in which he offered to present to the Institute \$25,000 to be used in the equipment of an Astronomical Observatory, to be erected on lands adjacent to the Museum Building and to be used primarily in giving instruction in Astronomy to students in the public and private schools of the city and to the general public. The sum of \$1,000 was paid by Mr. WHITE on account of this proposed gift, to be used, so far as necessary, in obtaining preliminary plans for the Observatory.

A Special Committee on The Plan and Scope of the Astronomical Observatory was appointed by the authority of the Trustees, consisting of GEORGE C. BRACKETT, GARRETT P. SERVISS, FRANKLIN W. HOOPER, FRANK SHERMAN BENSON, FREDERIC A. LUCAS, WILLIAM H. MAXWELL and B. G. WAY. This Committee has received recommendations as to the nature of the observatory required for teaching purposes from the Executive Committee of the Department of Astronomy, and has consulted with Prof. WILLIAM H. PICKERING, of the Harvard University Observatory, with regard to a site for the Observatory and its equipment. Prof. PICKERING has recommended that the Observatory be

located in Institute Park, southwesterly of the Museum Building.

During the educational year of 1905-1906, the Committee prepared a bill to be introduced in the State Legislature, the purpose of which was to authorize a change in the site of the Astronomical Observatory from a point southeast of the Museum Building near Washington Avenue, as originally planned in 1893-1894, to a site southwesterly from the Museum Building. The bill also authorized the city to establish on this new site an Astronomical Observatory; to appropriate the sum of \$150,000 to cover the cost of the Observatory Building; to enter into an agreement with the Institute for the administration of the Observatory, and to make annual appropriations for the maintenance of the Observatory. This measure was approved by the Department of Parks of the city, passed by the Legislature, approved by Mayor McCLELLAN, and signed by Governor HIGGINS on May 25, 1906. A form of agreement between the city and the Institute for the establishing and maintaining of an Astronomical Observatory, in pursuance of the new law, has been approved by the Department of Parks and is now awaiting action by the Board of Estimate and Apportionment of the city.

On June 24, 1909, the Board of Estimate and Apportionment authorized the change of site of the Observatory as specified in the form of agreement before the Board. A copy of the new law is printed in this and in each of the last six numbers of the Year Book.

The late WILLIAM F. SEBERT bequeathed to the Institute for the use of the Department two fine telescopes, about sixty inches in focal length, equatorially mounted. Mrs. LOUIS HARMON PEET presented, in 1906, in memory of her husband, a telescope of fine quality with a 4-inch objective. These instruments will be available for use in the proposed Observatory.

VI. The Astronomical Library contains upwards of five hundred volumes. Additions have been received from the late Mr. HENRY M. PARKHURST and from the estate of the late WILLIAM F. SEBERT. The Library may be consulted at the Museum, Eastern Parkway.

## DEPARTMENT OF BOTANY

### *Officers for 1913-1914*

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ABEL J. GROUT, Ph.D. } CYRUS A. KING, Ph.D. }	<i>Vice-Presidents</i>
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### *Executive Committee*

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JOHN McCALLUM	CHARLES WILLIS WARD
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Miss CHARLOTTE GOODRICH	FRANCIS T. HUGHES
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NORMAN TAYLOR	Mrs. W. E. DUNN
Miss GERTRUDE S. BURLINGHAM, Ph.D.	RUSSELL SILVER
Miss ISABEL TUTHILL	Mrs. JAMES H. HARNDEN

This Department was organized December 13, 1888, with twenty-one members. The present membership is two hundred and sixty-nine.

The work of the Department has been as follows:

I. Five Illustrated Lectures on "Botany," by CYRUS A. KING, Ph.D., of Erasmus Hall High School. Thursday afternoons.

Sept. 26—"The Flower: Its Origin, Variations and Function, Fertilization and Plant Breeding."

Oct. 3—"Protoplasm: Its Structure and Work; Nuclei, their Division; Formation of Embryo Sacs and Changes During Fertilization; Pollen Grains; the Formation of the Embryos of Ripe Seeds."

Oct. 17—"Seed Germination: Influence of Air, Light, Water and Temperature; The Food Supply of Seeds; Digestion; How Young Plants Respond to Light, Water and Gravity.

Oct. 24—"The Root and Stem: Their Origin, Development, Work and the Variations of Each; Their Economic Value."

Oct. 31—"Leaves: Their Origin, Structure, Work, Types, Variation and Economic Uses."

II. Four Illustrated Lectures on "The Evolution of Plant Life in Geologic Times," by ARTHUR HOLICK, Ph.D., of the New York Botanical Garden. Monday evenings, beginning January 20. For Subjects of these Lectures see Department of Geology.

III. Four Illustrated Lectures on "Botany," by GEORGE C. WOOD, B.A., of the Boys' High School. Monday evenings.

Apr. 7—"The Role of Nutrition, Respiration, Reproduction and Protection in the Life of Plants."

Apr. 14—"The Role of Variation, Heredity and Selection in the Growth of Plants."

Apr. 21—"Plant Life and Growth in the Production of Ornamental Flowers and Grains."

Apr. 28—"Application of the Essential Factors of Plant Life and Growth in the Production of Fleshy Fruits in the Hudson Valley."

IV. Four Illustrated Lectures on "The Mosses," by ABEL J. GROUT, Ph.D., of the Curtis High School, Vice-President of the Department. Friday afternoons.

Mar. 28—"Aesthetic and Economic Value of Mosses. Life History and Relationships to Other Groups of Plant Life."

Apr. 4—"Structure of Vegetative and Reproductive Organs." Classification.

April 11—"Ecology—Some Interesting Adaptations of Mosses; Remarkable Vitality of Leaf Cells; Beautiful and Curious Peristomes and their Work in Spore Dispersal."

Apr. 18—"Some Common Mosses; the Peat Mosses; the Georgias; Cord Mosses; 'the Brownies,' etc."

V. Single Lecture under the auspices of the Department of Botany and the BROOKLYN BOTANIC GARDEN, by HUGO DE VRIES, Ph.D., Professor of Biology and Director of the Botanical Garden at the University of Amsterdam. Subject: "Plant Breeding in the Botanic Garden of Amsterdam," on Thursday evening, September 12.

VI. Four Illustrated Conferences held in the Science Room on Saturday evenings under the auspices of the Natural Science Committee.

Nov. 2—Prof. HENRY E. CHAPIN, M.Sc., President of the Department of Botany. Subject: "The Earliest Seed Bearing Plants."

Nov. 30 and Jan. 11—Dr. CHARLES LLOYD, Past Professor of Materia Medica and Botany at the Eclectic Medical College of New York.

Subject: "The Medical Properties and Uses of Some of Our Native Plants."

Dec. 21—NORMAN TAYLOR, Curator of Plants, Brooklyn Botanic Garden. Subject: "The Effects of Geology on Our Local Flora."

#### VIII. SPRING FIELD MEETINGS, Saturdays.

Sept. 14—New Dorp, S. I., conducted by ABEL J. GROUT, Ph.D.

Sept. 21—Queens, L. I., conducted by Prof. HENRY E. CHAPIN, D.Sc.

Sept. 28—Brooklyn Botanic Garden, conducted by Prof. C. STUART GAGER, Ph.D.

Oct. 5—Fort Lee Junction, conducted by Mrs. MARY HOLTZOFF.

Oct. 12—Englewood, N. J., conducted by Miss EDITH B. BRAINERD.

Oct. 19—Hoffman Boulevard, conducted by Mr. JOHN McCALLUM.

Oct. 26—Flushing, L. I., conducted by Mrs. CLAYTON A. PETERS.

Nov. 2—Westbury, L. I., conducted by Mrs. CLAYTON A. PETERS.

### VIII. SPRING FIELD MEETINGS, Saturdays.

Apr. 19—Prospect Park, conducted by J. J. LEVISON, M.F.

Apr. 26—Englewood, N. J., conducted by Miss EDITH B. BRAINERD.

May 3—Clove Lake, S. I., conducted by Miss E. ADDIE AUSTIN.

May 10—Palisade Park, N. J., conducted by Prof. GEORGE C. WOOD.

May 24—Montclair Heights, N. J., conducted by Miss GERTRUDE S. BURLINGHAM, Ph.D.

June 7—Grassmere Station, S. I., conducted by JOHN McCALLUM.

June 14—Kissena Lake, L. I., conducted by CHARLES ERICSON, of New York.

June 21—Haw Tree Creek, Jamaica South, L. I., conducted by Miss ANNA B. GALLUP, Curator of the Children's Museum.

IX. An Autumn Course of Instruction in Botany on ten successive Saturday mornings, beginning October 12, conducted by Mrs. CLAYTON A. PETERS, Ph.B.

X. A Fifteen Weeks' Course of Instruction in the Study of Trees, on Friday evenings, beginning October 11, conducted by J. J. LEVISON, M.F., Forester, Brooklyn Park Department, Secretary and Treasurer of the American Association of Park Superintendents.

XI. Spring Field Course in Botany. Eight Saturdays, beginning April 12, conducted by Mrs. CLAYTON A. PETERS, Ph.B.

XII. Instruction in Botany for School Children was furnished at the Children's Museum, Bedford Park, Brooklyn Avenue, Miss ANNA B. GALLUP, B.Sc., Curator.

XIII. The Botanical Collections comprise about 35,000 mounted and labeled specimens. It includes the large collection presented by Mr. WILLIAM CALVERLEY; the collections made by the late Rev. CHARLES H. HALL, D.D., LL.D., first President of the Department, and presented by Mrs. HALL to the Institute; the collection gathered together by the late Rev. GEORGE D. HULST, Ph.D., and presented by Mrs. HULST to the Institute; the collection of Mosses presented by Mrs. ANNIE MORRILL SMITH, Member of the Executive Committee of the Department; the collection of Long Island Fungi, presented by the Rev. J. L. ZABRISKIE; the EDWARD B. STURGES Collection of Plants of Long Island; the E. S. MILLER Collection and several smaller collections.

A few additions were made to the Botanical Collections through the generosity of friends during the past year. It is expected that still other additions will be made during the coming year, and every practicable aid will be given to the Public to improve their own private collections.

The collections also comprise a set of enlarged Botan-

ical Models made by Dr. Auzoux, of Paris, and a set of enlarged Botanical Models, made by M. EMILIE DEVROLLE, of Paris, and arranged in cases in the Children's Museum in Bedford Park.

XIV. A few Botanical Books are available for reference and study at the Museum Building.

The Children's Museum Library also contains a good selection of books on Botany for reference.

The Library hours are from 9 A. M. until 5.00 P. M., at the Central Museum and from 9 A. M. until 5.30 P. M. at the Children's Museum.

A good working library in Botany is also available in the Science Room of the Institute in the Academy of Music building.

XV. Botanic Garden. At the meeting of the Board of Trustees, held in June, 1905, a communication was received from Mr. ALFRED T. WHITE, stating that several friends of the Institute had authorized him to offer to the Institute the sum of \$25,000, to be used in equipping a scientific Botanic Garden, whose primary purpose should be the teaching of Botany to students in the public and private schools of the city, and to the general public, provided such a garden be established on the grounds adjacent to the Museum. This offer of \$25,000 was later changed to a subscription of \$50,000 made under the same conditions.

By the authority of the Board of Trustees a special Committee on Plan and Scope of a Botanic Garden was appointed as follows: CHARLES A. SCHIEREN, LOWELL M. PALMER, ALFRED T. WHITE, FRANKLIN W. HOOPER, HENRY E. CHAPIN, FREDERIC A. LUCAS, GEORGE C. BRACKETT, WILLIAM H. MAXWELL, NATHANIEL L. BRITTON, JAMES DEAN and ABEL J. GROUT. This Committee held a meeting on June 27, 1905, when arrange-

ments were made for the gathering of information with regard to existing botanic gardens.

During the educational year 1905-06 this Committee gathered information with regard to botanic gardens in this country and abroad and prepared a bill to be introduced in the State Legislature, the purpose of which was to authorize the City of New York to establish a Botanic Garden and Arboretum on park lands between Flatbush and Washington Avenues, adjacent to the Museum site; to authorize the city to enter into an agreement with the Institute to administer the affairs of the Botanic Garden and Arboretum on such lands, and also to authorize the city to erect plant houses and rooms for instruction at a cost of \$100,000 altogether, and to provide for the annual maintenance of the Botanic Garden and Arboretum. This bill was approved by the Park Department of the city, passed by the Legislature, approved by Mayor McCLELLAN, and signed by Governor HIGGINS on May 24, 1906.

A form of agreement between the city and the Institute was prepared in pursuance of the law in the spring of 1907, and was approved by the Board of Park Commissioners of the city in December of that year and sent by that Board to the Board of Estimate and Apportionment. On June 24, 1909 the Board of Estimate and Apportionment voted unanimously to establish the garden in accordance with the form of agreement presented to it.

The actions taken with regard to the Botanic Garden and Arboretum during the years 1910 to 1913 are described at the end of this book.

#### DEPARTMENT OF CHEMISTRY

*Officers for 1913-1914*

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*President*

Prof. ALLEN ROGERS, Ph.D.

*Vice-President*

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ALBERT H. STOCKER	Prof. CHARLES M. ALLEN
ARTHUR C. LANGMUIR, Ph.D.	Prof. BENJAMIN M. JAQUISH
Prof. WILLIAM W. SHARE, Ph.D.	GUSTAVE W. THOMPSON
HERBERT B. BALDWIN	Prof. ALLEN ROGERS, Ph.D.
DANIEL D. JACKSON, Ph.D.	Prof. GEORGE C. WHIPPLE

The Department of Chemistry was organized in November, 1888, with twenty-seven members. The present membership is one hundred and eighty-six.

The work of the Department has been as follows:

I. Three Illustrated Lectures under the joint auspices of the POLYTECHNIC INSTITUTE and the BROOKLYN INSTITUTE, on "The Discovery of the Rare Elements of the Air," by Sir WILLIAM RAMSAY, F.R.S., LL.D., D.C.L., of London, England. These Lectures were delivered at the Polytechnic Institute on Tuesday evenings.

Oct. 22—"The Ancient History of the Gases of the Atmosphere."

Oct. 29—"The Discovery of Argon, Helium, Neon, Krypton and Xenon."

Nov. 5—"Niton or the Radium Emanation."

II. Four Illustrated Lectures on "Economics of Sewage Disposal," by Prof. GEORGE C. WHIPPLE, of Harvard University. Tuesday evenings.

Nov. 19—"The Constituents of Sewage."

Nov. 26—"The Application of Sewage to Land."

Dec. 3—"The Treatment of Sludge."

Dec. 10—"Profit and Loss."

III. Two Single Lectures.

Oct. 25—Prof. RUSSELL H. CHITTENDEN, Ph.D., of Yale University. Subject: "Nutrition." This Lecture was given

under the joint auspices of the New York Association of Biology Teachers and the INSTITUTE.

Jan. 14—Prof. IRVING W. FAY, Ph.D., of the Polytechnic Institute. Subject: "The Chemistry of Fire Protection."

IV. Illustrated Conference under the auspices of the Science Room Committee, on Saturday evening.

Jan. 25—Prof. IRVING W. FAY, Ph.D., President of the Department of Chemistry. Subject: "The Chemistry of Colloids."

V. The Collection of Chemicals and Chemical Apparatus belonging to the Department is in part in the Central Museum building and in part in the Children's Museum Building.

VI. The Library of the Department contains upwards of five hundred volumes mostly of standard works of reference.

## DEPARTMENT OF DOMESTIC SCIENCE

### *Officers for 1913-1914*

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Mrs. FRANKLIN W. HOOPER	Miss ELIZABETH DUTCHER
Miss FANNY D. PERKINS	Miss EMMA O. CONRO
Mrs. ALFRED J. BOULTON	Miss MABEL CAMPBELL
Miss ELIZA M. MOSHER, M.D.	Mrs. MARY E. SCHAUMBURG
Mrs. P. J. McKEON	Mrs. FRANK K. PERKINS

This Department was organized on November 13, 1893, with a membership of forty-two. The present membership is four hundred and seventy-one. The purpose of the

Department is the study of practical problems in Domestic Science. Standing Committees have been appointed on the following subjects:

1. The Sanitary and Economic Construction of Dwellings
2. The General Principles of House Furnishing
3. The Composition and Value of Foods
4. Cooking and Transformation of Foods
5. Labor Saving Methods and Utensils
6. Sanitation and Economy in Clothing

The work of the Department has been as follows:

I. Six Lectures illustrated by demonstrations and lantern photographs, by Miss ANNA BARROWS, of Columbia University. Monday afternoons.

- Oct. 29—"Principles of Cookery."
- Nov. 5—"Breakfast and Luncheon."
- Nov. 12—"Marketing and Dinners."
- Nov. 19—"Afternoon and Chafing Dish Teas."
- Nov. 26—"The Country Home."
- Dec. 3—"The Relation of Women to Agriculture."

II. Six Lectures, illustrated by demonstrations and lantern photographs, by Miss HELEN LOUISE JOHNSON, of New York. Monday afternoons.

- Jan. 6—"The Development of the American Home."
- Jan. 13—"The Cost of Keeping Clean, and the Cost of Food."
- Jan. 20—"Living on the Budget Plan."
- Jan. 27—"Common Sense in Diet."
- Feb. 3—"Household Operating Expenses."
- Feb. 10—"Marketing in Brooklyn."

III. Six Illustrated Lectures on "Art and the Home," by FRANK ALVAH PARSONS, M.A., President of the New York School of Fine and Applied Art. Tuesday afternoons.

- Feb. 18—"Art Applied to Interior Decoration."

Feb. 25—"Color; Its Source, Meaning and Application to Interior Furnishing."

Mar. 4—"The Use and Abuse of Historic Periods in Modern Furnishing."

Mar. 18—"The Place and Meaning of the French Decorative Periods."

Mar. 25—"The Application of the English Period to American Life."

Apr. 2—"The Choice, Framing and Hanging of Pictures in Homes."

#### IV. Two Single Lectures.

Nov. 6—MISS ELEANOR COLBY, of New York. Subject: "Color in Costume and in the Home," illustrated.

Feb. 6—WALTER PRATT LONG, of New York. Subject: "Co-operation as a Remedy for the High Cost of Living: Business versus Charity—Fact versus Theory."

#### V. Five Wednesday afternoon Conferences.

Oct. 9—MRS. WALTER L. HERVEY. Subject: "Business Methods in Housekeeping."

Nov. 13—MRS. FRANKLIN W. HOOPER. Subject: "The Use of Leisure Time."

Dec. 18—MRS. WALTER L. HERVEY. Subject: "Home Recreation for Boys and Girls."

Feb. 19—Joint Conference conducted by MRS. CHARLES LLOYD, Ex-President of the Urban Club, assisted by MRS. EUGENE J. GRANT, Ex-President of the Chiropean Club; MRS. HAVENS B. BAYLES, Ex-President of the Prospect Club; MRS. JAMES S. WATERMAN, Ex-President of the Kosmos Club; and MRS. JOHN B. CLARK, President of Urban Club. Subject: "The High Cost of Living."

Mar. 5—MISS HELEN KINNE, B.A., Professor of Household Art Education, Teachers College, Columbia University. Subject: "New Developments in Household Economics."

VI. Visit of the Members of the Department to the plant of the ALEXANDER CAMPBELL MILK COMPANY. Lecture on "The History of Milk from Cow to Consumer," illustrated with motion pictures, by Dr. CHARLES E. NORTH.

VII. Courses of Instruction in Domestic Art, Basketry and Weaving by Miss EVALYN M. GRISWOLD. These Courses are fully described under the Department of Fine Arts.

## DEPARTMENT OF DRAMATIC ART

### *Officers for 1913-1914*

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Mrs. BERTHA KUNZ BAKER	<i>Vice-Presidents</i>
HENRY GAINES HAWN	
Miss M. BLANCHE TOWNSEND	<i>Secretary</i>

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Miss ZITA H. DAVIS	W. PALMER SMITH
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HENRY GAINES HAWN	Miss SUSAN M. BARRY
B. W. HUEBSCH	Mrs. W. PALMER
Mrs. HENRY MADDOCK	

This Department was organized on Tuesday evening, December 10, 1912, with twenty-two members. The present membership is thirty-five.

The work of the Department as planned at the meeting on December 10 will include:

1. Lectures on the Drama.
2. Dramatic Readings.

3. Presentation of Plays.
4. Presentation of Music Dramas.
5. Courses of Instruction in the Drama and Dramatic Art. The work of the Department for the balance of the season, 1912-13, was as follows:

I. Dec. 31—(Tuesday)—Lecture by Prof. FRANK W. CHANDLER, Ph.D., of the University of Cincinnati. Subject: "George Bernard Shaw as a Satirical Dramatist."

II. Three Dramatic Readings.

Dec. 17—(Tuesday)—Mrs. JEAN BERGLAND SLOCUM, of Brooklyn. Subject: "Miscellaneous Programme: Selections in the Christmas Spirit." Accompanist, Mrs. LORA P. MOORE.

Dec. 27—(Friday)—Miss GLENN RAYMOND. Subject: "Galatea," by W. S. GILBERT.

Dec. 31—(Tuesday)—Mrs. ELIZABETH POOLER RICE, of Boston. Subject: "Miss Hobbs," by JEROME K. JEROME.

III. Two Dramatic Readings by Miss EDITH KUNZ of New York. Monday evenings.

Dec. 23—"Peter Pan."

Dec. 30—"King Arthur and His Knights."

IV. Three Dramatic Interpretations and Impersonations of Modern Dramas by Miss LOUISE WALLACE HACKNEY, of Chicago.

Feb. 14—"The Truth," a Modern Comedy by Clyde Fitch.

Feb. 20—"Prunella," a Fantastic Comedy by GRANVILLE BARKER and LAWRENCE HOUSMAN.

Feb. 28—"The House of Rimmon," by HENRY VAN DYKE.

## DEPARTMENT OF ELECTRICITY

*Officers for 1913-1914*

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Prof. ERICH HAUSMANN, E.E., M.S., Sc.D.	Vice-President
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J. P. WINTRINGHAM	Prof. ERICH HAUSMANN,
FREDERICK V. HENSHAW	E.E., M.S., Sc.D.
FRANK W. CONN	CHARLES E. ROEHL
Prof. JOHN S. MCKAY, Ph.D.	G. F. B. WILKINS
Prof. WM. C. PECKHAM, M.A.	H. LEH. SMITH
HUBERT S. WYNKOOP, M.E.	G. L. KNIGHT
FREDERICK C. BATES	ELMER A. SPERRY
WALTER F. WELLS, M.E.	SEVERN D. SPRONG
HENRY T. WEED, B.Sc.	

This Department was organized on March 21, 1890, with one hundred and thirty members. The present membership is two hundred and twenty-three.

The work of the Department has been as follows:

I. Five Illustrated Lectures on "The Elements of Hyperbolic Functions and Their Application in Electrical Engineering," by ARTHUR E. KENNELLY, S.D., A.M., Professor of Electrical Engineering, Harvard University. These Lectures were delivered on the second Thursdays of each month in the Physics Lecture Room, Polytechnic Institute.

Oct. 10—"Hyperbolic Angles; their Elementary Properties and Uses."

Nov. 14—"The Behavior of Direct-Current Lines of Uniform Linear Conductor Resistance."

Dec. 12—"The Behavior of Alternating-Current Lines of Uniform Linear Conductor Impedance."

Jan. 9—"The Application of Hyperbolic Functions to Long Alternating-Current Power-Transmission Lines."

Feb. 13—"The Application of Hyperbolic Functions to

Telephone Lines; both Loaded and Unloaded; Single and Composite."

II. Two Single Illustrated Lectures on Saturday evenings.

Dec. 7—SYDNEY W. ASHE, M.E., of the General Electric Company, Harrison, N. J. Subject: "Modern Illuminants."

Feb. 1—BANCROFT GHERARDI, E.E., of the New York Telephone Company. Subject: "Long Distance Underground Telephony."

III. The COLLECTION OF ELECTRICAL APPARATUS has been transferred to the Central Museum Building. The Library of the Department has been placed with the collection for reference.

### DEPARTMENT OF ENGINEERING

*Officers for 1913-1914*

NELSON P. LEWIS, B.A., C.E.	President
WILLIAM J. BALDWIN, C.E.	Vice-President
Prof. RALPH C. TAGGART, M.E.	Secretary

#### *Executive Committee*

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ELECTUS D. LITCHFIELD, M.E.	EDWIN H. THATCHER
Prof. RALPH C. TAGGART	FRANK W. CONN
Prof. WILLIAM D. ENNIS	G. W. TILLSON, C.E.
ARTHUR S. TUTTLE, C.E.	HOMER L. BARTLETT, C.E.
WILLIAM J. BALDWIN, C.E.	HERMAN STUTZER, C.E.
FREDERICK C. BATES	HERBERT F. STIMPSON
ALBERT F. TUCKER	SAMUEL B. BALLAND, C.E.

The organization of the Department of Engineering was effected on March 12, 1889, with thirty-six members. The present membership is one hundred and seventy-four.

The work of the Department has been as follows:

I. Four Illustrated Lectures on "The Economics of Sewage Disposal," by Prof. GEORGE C. WHIPPLE, of Harvard University. Tuesday evenings.

Nov. 19—"The Constituents of Sewage."

Nov. 26—"The Application of Sewage to Land."

Dec. 3—"The Treatment of Sludge."

Dec. 10—"Profit and Loss."

II. Ten Single Illustrated Lectures.

Oct. 5—(Saturday evening)—Hon. CALVIN TOMKINS, Commissioner of Docks, City of New York. Subject: "Present and Prospective Needs of the Dock Department of the City."

Nov. 8—(Friday evening)—HENRY F. HORNBOSTEL, Consulting Engineer for the Hellgate Bridge. Subject: "The New Hellgate Bridge and the New York Connecting Railway."

Nov. 18—(Monday evening)—GROSVENOR ATTERBURY, of New York. Subject: "The Development of the Sage Foundation Company at Forest Park Gardens."

Jan. 6—(Monday evening)—GEORGE A. HARWOOD, of New York. Subject: "The Grand Central Terminal."

Feb. 17—(Monday evening)—ARNOLD W. BRUNNER, of New York. Subject: "Rational City Planning."

Mar. 3—(Monday evening)—EDWARD H. BENNETT, of Chicago. Subject: "City Planning."

Mar. 31—(Monday evening)—Prof. ARTHUR H. BLANCHARD, of Columbia University. Subject: "Highway Engineering in Europe and America."

Apr. 2—(Wednesday evening)—EDWIN J. FORT, of Brooklyn. Subject: "The Problem of Sewage from Brooklyn and Queens."

Apr. 22—(Tuesday evening)—Hon. CHARLES N. CHADWICK, M.A., Member of the Water Supply Commission of

New York City. Subject: "The New Catskill Water Supply System of Greater New York."

May 5—(Monday evening)—DANIEL L. TURNER, of New York. Subject: "New Subway Construction."

III. Two Illustrated Lectures under the auspices of the Natural Science Committee, on Saturday evenings.

Oct. 19—Prof. GEORGE C. WHIPPLE. Subject: "The Problem of Ventilation."

Dec. 7—WILLIAM J. BALDWIN, C.E., Member of the American Society of Civil Engineers. Subject: "Fresh Air in Our Homes, Schools and Public Buildings."

IV. The Library of the Department. Mrs. CHARLES E. EMERY has presented to the Department the entire library of her husband, the late CHARLES E. EMERY, Ph.D., for seven years President of the Department. The library consists of five hundred and five bound volumes, about two thousand pamphlets, and many numbers of unbound periodicals.

The Library of the Department is permanently installed in the Central Museum Building.

#### DEPARTMENT OF ENTOMOLOGY

##### *Officers for 1913-1914*

CHARLES LOUIS POLLARD, M.A.,	<i>President</i>
EDWARD L. GRAEF	<i>Honorary Curator</i>
JOHN J. SCHOONHOVEN, M.A.	<i>Vice-President</i>
GEORGE P. ENGELHARDT	<i>Secretary</i>
SILAS C. WHEAT	<i>Librarian</i>

##### *Executive Committee*

CHARLES LOUIS POLLARD, M.A.	RICHARD F. PEARSALL
EDWARD L. GRAEF	GEORGE FRANCK
ARCHIBALD C. WEEKS	CARL SCHAEFFER
JACOB DOLL	GEORGE P. ENGELHARDT
SILAS C. WHEAT	JOHN J. SCHOONHOVEN, M.A.

*Committee on Collections*

GEORGE FRANCK  
ARCHIBALD C. WEEKS

JACOB DOLL  
GEORGE P. ENGELHARDT  
CARL SCHAEFFER

This Department was organized by the Brooklyn Entomological Society in September, 1888, with thirty-five members, and was reorganized April 29, 1895, with a membership of fifty-two. The present membership is forty-three.

The work of the Department has been as follows:

I. Two Single Lectures.

Feb. 24—(Monday evening)—Prof. LELAND O. HOWARD, Ph.D., Chief Entomologist, United States Department of Agriculture, Bureau of Entomology. Subject: "Insect-borne Diseases: the Anti-fly Campaign in Cleveland, and its Application to this City," illustrated by lantern photographs and motion pictures.

May 1—(Thursday evening)—Prof. CHARLES LOUIS POLLARD, M.A., Director of the Staten Island Association of Arts and Sciences, President of the Institute Department of Entomology. Subject: "Mimicry in the Insect World," illustrated by the projectoscope and specimens.

II. Two Conferences in the Science Room on Saturday Evenings, under the auspices of the Natural Science Committee.

Nov. 16—J. H. M. COOK, of New York. Subject: "The Honey-bee—his Winter Life."

Mar. 29—Prof. EDGAR L. DICKERSON, of the Manual Training and Technical High School, Newark, N. J. Subject: "Aquatic Insects."

III. The Entomological Collections.

These collections have received several additions during the past few years. In 1890 the late WILLIAM CALVERLEY presented to the Institute the entire collection of Lepi-

doptera made by his father, STEPHEN CALVERLEY, during the years 1832-1872. The collection contains the type *Papilio calverlei*.

In the Autumn of 1898 FRANK S. JONES, a Member of the Board of Trustees, and a Member of the Committee on Museum of Science, of the Institute, presented ten thousand dollars (\$10,000) to the Corporation to be used in the purchase of the BERTHOLD NEUMOEGEN COLLECTION OF LEPIDOPTERA. The purchase of the Neumoegen Collection was effected in December, and thus the Institute became the possessor of a most valuable collection of Lepidoptera—a collection which contains many type specimens. The collection is beautifully mounted, labeled, classified and arranged in cabinet drawers, and contains, approximately, forty-five thousand specimens, eleven thousand species and eleven hundred type specimens.

The NEUMOEGEN COLLECTION was made by BERTHOLD NEUMOEGEN during a period of twenty years, with the assistance of JACOB DOLL, who acted as Curator of the collection during the period of its formation, 1875 to 1895.

EDWARD L. GRAEF, a Life Member of the Institute, President of the Department of Entomology, and now Honorary Curator of the Entomological Collections of the Institute, offered ten years ago to present his entire collection of Lepidoptera to the Institute on condition that the BERTHOLD NEUMOEGEN COLLECTION should be purchased by the Institute for its Museum. As soon as the Trustees had acquired the title to the NEUMOEGEN COLLECTION, Mr. GRAEF presented his collection, comprising North American, European and other exotic Noctuidæ, Bombycidæ and Sphingidæ, and other families, including some type forms.

The late Rev. GEORGE D. HULST, Ph.D., presented during his lifetime collections of Geometridæ and Pyralidæ, comprising several cotypes, and many hundred examples of species.

P. ELBERT NOSTRAND, a Life Member of the Institute, presented to the Institute in the autumn of 1898 his collection of Lepidoptera, numbering some three thousand specimens, together with a cabinet containing the same.

CHARLES S. MCKNIGHT, M.D., of Saratoga, presented in October, 1901, his collection of North American Lepidoptera.

JACOB DOLL has very generously loaned for study at the Museum Building a small part of his own private collection of Lepidoptera, comprising some thirty thousand specimens. It is desirable that this collection should be purchased by the Institute, in order that the Collections in Lepidoptera may be as complete as they can be made from collections in this country, and also to enable the Institute, by exchanging with foreign collectors, to enlarge the number of its species and varieties.

Large additions to the collections have been made through the following expeditions:

(1) Expedition to Brownsville in Southern Texas from April 15 until September 5, 1903, by JACOB DOLL and CARL SCHAEFFER.

(2) Expedition to Brownsville and other points in Texas from June to September, 1904, by CARL SCHAEFFER.

(3) Expedition to Utah from May until September, 1904, by JACOB DOLL and GEORGE P. ENGELHARDT.

During the summer of 1905 Mr. SCHAEFFER made an expedition to Arizona.

These expeditions add not only many forms to the Museum Collections, but also are the means of discovering new species and varieties.

A Special Collection of the Insects of Long Island is being made for the use of Members in the Science Room in the Academy of Music. Valuable contributions have been

made to this collection during the past year by Mr. GEORGE FRANCK and by Mr. SILAS C. WHEAT.

IV. The Library on Entomology comprises most of the standard works on the subject, together with nearly complete series of the publications of Entomological Societies.

### DEPARTMENT OF ETHNOLOGY

*Executive Committee for 1913-1914*

STANSBURY HAGAR

MARSHALL I. SAVILLE

Miss NATALIE CURTIS

HARLAN I. SMITH

GEORGE KRIEHN, Ph.D.

Prof. GEORGE H. PEPPER

FREDERICK I. MONSEN

This Department was organized in November, 1903, with nine members. The present membership is ninety-seven.

I. The Collections of the Department have been considerably enlarged during the past year. The collections in the Museums include the WILLIAM WALLACE TOOKER Collection of Indian Relics of Long Island; the GEORGE F. KUNZ Collection of Relics from the Mississippi Valley; the WARD Collection of Models of Pueblos and Cliff Dwellings; the FREDERICK W. STARR Collection of Models of Portrait Busts of Pueblo Indians and of Pueblo Sculptures; the CHARLES A. SCHIEREN Collection of Pottery from the Pueblos, the Cliff Dwellings, and from Peru; the FRANKLIN W. HOOPER Collection of Swiss Lake Dwelling Relics, the CLARENCE W. RIGGS Collection of Pueblo Pottery; the Japanese Collections presented by Colonel ROBERT B. WOODWARD, GEORGE C. BRACKETT, and Hon. CARL H. DE SILVER. The Collection of Cliff Dwelling Relics presented by GEORGE FOSTER PEABODY and A. AUGUSTUS HEALY, and the collections obtained by STEWART CULIN, Curator of Ethnology, during the summers of 1903, 1904, 1905, 1906 and 1907 in Arizona, New Mexico and on the Pacific Coast.

The Department also has the following loan collections: (1) The RUSSELL STURGIS, 2d Ethnological Collection from the Pacific Islands and (2) The STANSBURY HAGAR Collection of Indian Relics.

II. The collections in Ethnology from the Southwest are now arranged, for the most part, in the large hall of American Ethnology on the first floor of the Museum. The collections in Eastern Ethnology are exhibited in the large gallery in the basement of the Museum.

III. Important additions were made to the Ethnological Collections during the two seasons just passed, through the expeditions of STEWART CULIN to Arizona, New Mexico, California, and Japan.

## DEPARTMENT OF FINE ARTS

### *Executive Committee for 1913-1914*

Prof. WILLIAM H. GOODYEAR, M.A.	<i>President</i>
Rev. ALFRED DUANE PELL, S.T.D.	<i>Vice-President</i>
GEORGE KRIEHN, Ph.D.	<i>Secretary</i>

### *Executive Committee*

Prof. WILLIAM H. GOODYEAR, M.A.	ALBERT HERTER
Rev. ALFRED DUANE PELL, S.T.D.	PAUL DOUGHERTY
Mrs. E. CHRISTINE LUMSDON	Miss SUSAN M. BARSTOW
JOSEPH H. BOSTON	WILLIAM H. FOX
MISS EVALYN M. GRISWOLD	Mrs. BESSIE POTTER VONNOH
WALTER H. CRITTENDEN	Rev. WILLIAM H. INGERSOLL
OTTO WALTER BECK	Mrs. GEORGE NOTMAN
HAMILTON E. FIELD	GEORGE KRIEHN, Ph.D.
Prof. WALTER S. PERRY, M.A.	GARDNER SYMONS
Miss ELEANOR C. BANNISTER	WILLIAM T. EVANS

The establishment of this Department was authorized by the Council and the Board of Trustees on February 11, 1888. The membership in June, 1889, was one hundred and thirty-two. The present membership is twelve hundred

and one. The Departments of Archæology and Fine Arts were combined in November, 1904.

This Department was regularly organized on Monday, March 16, 1903.

The work of the Department has been as follows:

I. Six Illustrated Lectures on "Northern France; Its Beauty, Romance and Art," by ARTHUR STANLEY RIGGS, F.R.G.S., of New York, Wednesday evenings, beginning November 13. For subjects of these lectures see Department of Geography.

II. Six Illustrated Lectures on "Greece," by Miss FLORENCE A. STONE, M.A., of Athens, Greece, Thursday afternoons, beginning January 2. For subjects of these lectures see Department of Geography.

III. Six Illustrated Lectures on "Paris," by Mrs. JAMES RAVENEL SMITH, of New York, Friday afternoons.

- Jan. 3—"Earliest Paris: Charlemagne."
- Jan. 10—"Paris of the Crusades; St. Louis IX."
- Jan. 17—"Paris of the Renaissance."
- Jan. 24—"Paris of the Great Century; Louis XIV."
- Jan. 31—"Paris of the Revolution."
- Feb. 7—"Paris of the Nineteenth Century."

IV. Five Illustrated Lectures on "Colonial Architecture in New England," by Prof. H. LANGFORD WARREN, M.A., of Harvard University, Wednesday evenings, beginning January 15. For subjects of these Lectures see Department of Architecture.

V. Six Illustrated Lectures on "German and Spanish Art," by Miss HARRIETTE H. WINSLOW, of Buffalo, N. Y., Friday afternoons, beginning February 14. For subjects of these Lectures see Department of Painting.

VI. Six Illustrated Lectures on "Art and the Home," by Frank ALVAH PARSONS, M.A., President of the New York School of Fine and Applied Art. For subjects of these Lectures see Department of Domestic Science.

VII. Six Illustrated Lectures on "Chapters in French History and Art," by Mrs. JAMES W. HASLEHURST, of New York, Wednesday afternoons.

Feb. 19—"French Chateaux, Orleans and Joan of Arc."  
 Feb. 26—"French Chateaux; Burgundy and Bresse."  
 Mar. 5—"French Courts."  
 Mar. 12—"French Cathedrals and Walled Cities."  
 Mar. 19—"Famous French Women."  
 Mar. 26—"Costumes and Customs from the Fifteenth Century."

VIII. Six Illustrated Lectures on "Art and Architecture of Spain," by Prof. CHARLES UPSON CLARK, Ph.D., of Yale University, Tuesday afternoons.

Apr. 1—"Iberian Art; the Romans in Spain."  
 Apr. 8—"Medieval Spanish Art; the MS. Miniatures."  
 Apr. 15—"Moorish Art in Spain; the Alhambra."  
 Apr. 22—"The Christian Revival in Spain; the Great Cathedrals."  
 Apr. 29—"The Development of Spanish Painting under Flemish and Italian Influences; the Titians and Raphaels in the Prado."  
 May 6—"The Great Spanish Masters; Ribera, el Greco, Murillo, Velasquez, Goya."

IX. Six Lectures on "Italian Cities and Towns," by Prof. BRUNO ROSELLI, Ph.D., of Adelphi College, Thursday afternoons, beginning April 17. For subjects of these Lectures see Department of Geography.

X. Four Illustrated Lectures on "Architectural Refinements," by Prof. WILLIAM H. GOODYEAR, M.A., Curator of

Fine Arts, Institute Museum, Wednesday evenings, beginning April 9. For subjects of these Lectures see Department of Architecture.

### XI. Two Single Lectures.

A. Nov. 6—(Wednesday afternoon)—Illustrated Lecture by Miss ELEANOR COLBY, of New York. Subject: "Color in Costume and in the Home."

B. Apr. 15—(Tuesday evening)—Lecture by WILL HUTCHINS, of New York. Subject: "Post Impressionism and the Revolt in Art."

### XII. Museum Lectures.

A Series of Five Free Public Lectures in the Central Museum Building, Eastern Parkway, by Dr. JAMES P. HANEY.

Feb. 24—"Approach to the Study of Pictures (for Teachers)."

Mar. 3—"Approach to the Study of Sculpture (for Teachers)."

Mar. 10—Normal Lesson on Pictures, with Class of Pupils (for Teachers).

Apr. 7—"A Talk on Art to Public School Pupils."

Apr. 14—"A Talk on Art to Public School Pupils (concluded)."

XIII. Mar. 20—(Thursday evening)—Special Lecture and Exhibit of Natural Color Photographs (Courtellement slides), by ALFRED H. BROWN, M.A. Subject: "Spain of the Moors, Velasquez and the Prado."

XIV. Eight Courses of Instruction at the Art Building, 174 Montague Street.

A. "The Appreciation of Modern Art," conducted by Prof. LEIGH HARRISON HUNT, M.A., of the College of the City of New York. Thirty Sessions of one hour each, Monday afternoons, beginning October 7.

- B. Evening Instruction in "Handicraft Work," conducted by Miss EVALYN M. GRISWOLD.
- C. "Weaving," conducted by Miss EVALYN M. GRISWOLD, Tuesday afternoons, at three o'clock.
- D. "Freehand Drawing and Water Color," conducted by Miss EVALYN M. GRISWOLD. Wednesday afternoons.
- E. "Metal Work and Jewelry," conducted by Miss EVALYN M. GRISWOLD. Wednesday afternoons.
- F. "Arts and Crafts," conducted by Miss EVALYN M. GRISWOLD. Thursday afternoons.
- G. "Art Instruction," conducted by Miss EVALYN M. GRISWOLD. Friday afternoons.
- H. "Drawing and Construction," conducted by Mrs. ABBY R. HOBGOOD, of the Brooklyn Training School for Teachers. Saturday mornings.

#### XV.—THE EVENING ART SCHOOL

For the benefit of Art Students desiring to pursue courses of Art Instruction in evening classes, the Evening Art School has been established in conjunction with the BROOKLYN ART ASSOCIATION. The following courses were conducted at the Art Building, 174 Montague Street.

- A. Evening Life Class for Men, conducted by JOSEPH H. BOSTON. Five evenings each week, beginning October 1.
- B. Evening Portrait Class, conducted by Mr. JOSEPH H. BOSTON. Five evenings each week, beginning October 1.

#### XVI. THE ART COLLECTIONS

The Art Collections in the Museum comprise the following:

- (1) The general COLLECTIONS OF OIL PAINTINGS exhibited in the galleries on the third floor.

(2) A LOAN COLLECTION OF OIL PAINTINGS exhibited in the same galleries.

(3) The TISSOT COLLECTION of pictures illustrating the life of Christ, comprising 350 water colors and 161 pen and ink sketches, by JAMES J. TISSOT, purchased in 1900 for \$60,000, contributed by Members of the Institute. The water colors are on exhibition in the West gallery on the third floor.

(4) The COLLECTION OF ORIENTAL GLASS presented in 1901 by Col. ROBERT B. WOODWARD, Member of the Board of Trustees. To the original collection additions have been made from time to time during the past eleven years by Colonel WOODWARD. This collection is exhibited in one of the galleries on the first floor of the eastern section.

(5) The COLLECTION OF CASTS representing Greek, Roman and later sculpture presented by Members and friends of the Institute in 1898, to which additions have been made from time to time during the past fourteen years, on exhibition in the vestibule on the first floor of the Museum, second section.

(6) A COLLECTION OF SCULPTURES in Marble and Bronze exhibited in the alcoves of the vestibule on the first floor and in the dome room on the third floor of the Museum, presented by Members and friends of the Institute.

(7) The COLLECTION OF JAPANESE ART presented by CARL H. DE SILVER, ROBERT B. WOODWARD, ALFRED T. WHITE, THOMAS T. BARR, GEORGE C. BRACKETT and others, exhibited in part in the Japanese Room in the basement of the Western wing and in part in the Fine Arts Collections.

(8) COLLECTION IN JAPANESE ETHNOLOGY, made by Mr. STUART CULIN in Japan, exhibited in the Japanese Room.

(9) The ALFRED DUANE PELL COLLECTION OF EUROPEAN CHINA, presented by the Rev. ALFRED DUANE PELL, of

New York, and exhibited in the square gallery on the first floor of the Eastern section.

(10) The MAJOLICA LUNETTE, by GIOVANNI DELLA ROBBIA, presented by A. AUGUSTUS HEALY, President of the Board of Trustees, and exhibited in the small Eastern gallery on the first floor.

(11) A COLLECTION OF TIFFANY FAVRILE GLASS (300 pieces) loaned by CHARLES W. GOULD, of New York.

(12) The COLLECTION OF ENLARGED BROMIDE PHOTOGRAPHS illustrating the Architecture of Italy and France, exhibited in part in the hallway of the second floor.

(13) A COLLECTION OF REPLICAS OF GREEK COINS from the BRITISH MUSEUM, exhibited about the eastern vestibule of the Central Section.

(14) COLLECTION OF SOME 4,000 PHOTOGRAPHS OF WORKS OF ART, including ARCHITECTURE, mounted, catalogued and arranged in cases.

(15) COLLECTION OF GREEK, ETRUSCAN AND ROMAN ANTIQUITIES, presented by many Members of the Institute and exhibited in the East gallery on the first floor.

(16) COLLECTION OF EGYPTIAN ART AND ARCHAEOLOGY, presented by many Members of the Institute and purchased by the contributions of many members to the Museum Collection Funds of 1906, 1907 and 1908.

(17) THE JOHN S. SARGENT COLLECTION of eighty-three water-color paintings, presented in 1909 by a number of trustees and other friends of the Institute.

(18) The SAMUEL P. AVERY COLLECTION of Chinese Cloisonnés and Jades comprising some one hundred and fifty-three pieces, presented in 1909 and 1911 by SAMUEL P. AVERY.

(19) The CYRUS J. LAWRENCE COLLECTION of Baryè Bronzes, Paintings and Sketches presented in 1910 by a

number of friends of the Institute, all enrolled as such in year-book number twenty-two. The collection contains one hundred and three sculptures, seven paintings, and five sketches, and was purchased for \$30,500.

(20) THE WILLIAM A. PUTNAM COLLECTION OF ROYAL COPENHAGEN PORCELAINS presented in 1910, comprising some ninety-six pieces.

(21) The WILLIAM T. EVANS COLLECTION of Paintings by American Artists.

(22) The GEORGE A. HEARN COLLECTION of Paintings by American Artists.

(23) The CHARLES A. SCHIEREN COLLECTION of Paintings including twenty-eight paintings from the HENRY T. CHAPMAN COLLECTION.

(24) The WINSLOW HOMER COLLECTION of Water Color Paintings.

(25) The REMBRANDT CLUB COLLECTION of Vestments from Italy.

(26) FREDERICK LOESER presented in 1902 \$10,000, the interest of which is to be expended in the purchase of photographs of works of art, casts of sculptures, and other forms of reproduction of art works, and when the Museum is well supplied with these, the income of the fund may be used in purchasing original works of art.

## DEPARTMENT OF GEOGRAPHY

### *Officers for 1913-1914*

HERBERT L. BRIDGMAN, M.A.

*President*

Prof. HERSCHEL C. PARKER, Ph.D.

*Vice-President*

BENJAMIN F. SEAVER

*Secretary*

*Executive Committee*

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Prin. JAMES CRUIKSHANK, LL.D.	BURTON HOLMES
Prin. WILLIAM J. O'LEARY	GARRETT P. SERVISS, B.Sc.
Prof. HERSCHEL C. PARKER, Ph.B.	DWIGHT L. ELMENDORF
Prin. ANDREW I. SHERMAN	Hon. HARRINGTON PUTNAM
Prin. CHARLES Q. RAINES	BENJAMIN F. SEAVER
E. M. NEWMAN	JOHN B. CREIGHTON
FREDERICK I. MONSEN, F.R.G.S.	Dist. Supt. EDWARD B. SHALLOW

The organization of the Department of Geography was effected on February 15, 1890, with thirty members. The present membership is six hundred and six.

The work of the Department has been as follows:

I. Three Illustrated Lectures on "Quaint Brittany," by Mrs. WALTER L. HERVEY, of New York. Tuesday afternoons.

Oct. 8—"Engagement and Marriage Customs among the Bretons."

Oct. 15—"Breton Songs, Legends and Superstitions."

Oct. 22—"Famous Breton Fairs and Pardons."

II. Six Illustrated Lectures on "Northern France, Its Beauty, Romance and Art," by Arthur Stanley Riggs, F.R.G.S., of New York. Wednesday afternoons.

Nov. 13—"In Picardy."

Nov. 20—"In Normandy."

Nov. 27—"In Brittany."

Dec. 4—"In Champagne and Burgundy."

Dec. 11—"In Touraine."

Dec. 18—"In Ile de France (Paris)."

III. Six Illustrated Lectures on "China and Japan," by Prof. TOYOKICHI IYENAGA, Ph.D., of Toyko. Thursday afternoons.

Nov. 14—"Tokyo: Political and Social Center of the Mikado's Empire."

Nov. 21—"Moji: A Typical City of Industrial Japan."

Nov. 28—"Dairen: Commercial Metropolis of South Manchuria."

Dec. 12—"Harbin: Economic and Strategic Base of the Russian Influence in the Far East."

Dec. 19—"Peking: Seat of the Old Monarchy and the New Republic."

Dec. 26—"Shanghai: China's Commercial and Financial Center and the Headquarters of Republican Leaders."

IV. Six Illustrated Lectures on "Greece," by Miss FLORENCE A. STONE, M.A., of Athens, Greece. Thursday afternoons.

Jan. 2—"Crete."

Jan. 16—"Crete."

Jan. 23—"The Cyclades."

Jan. 30—"The Greek Theater."

Feb. 6—"The Greek Theater."

Feb. 13—"Medieval Greece."

V. Six Illustrated Lectures on "Paris," by Mrs. JAMES RAVENEL SMITH, of New York. Friday afternoons, beginning January 3. For subjects of these lectures see Department of Fine Arts.

VI. Three Illustrated Lectures by B. R. BAUMGARDT, of Los Angeles, California.

Jan. 24—"Switzerland."

Jan. 31—"The Fjords and Fjords of Norway."

Feb. 7—"Sweden and the Swedes."

VII. Six Illustrated Lectures on "Art and Architecture of Spain," by Prof. CHARLES UPSON CLARK, Ph.D., of Yale University. Tuesday afternoons, beginning April 1. For subjects of these Lectures see Departments of Architecture and Fine Arts.

VIII. Six Illustrated Lectures on "Italian Cities and Towns," by Prof. BRUNO ROSELLI, Ph.D., of Adelphi College. Thursday afternoons.

Apr. 17—"Pisa: A Maritime Republic Deserted by the Sea."

Apr. 24—"Ravenna: the Ancient Gateway of Oriental Power."

May 1—"San Gimignano: the Town of the Fair Towers."

May 8—"Urbino: Ducal Hostelry of the Renaissance Arts."

May 15—"Pistoia: the Cinderella of Tuscan Towns."

May 22—"Perugia: the Proud Stronghold of the Griffin Rampant."

#### IX. MUSEUM LECTURES.

Four Illustrated Lectures by Dr. CARLOS E. CUMMINGS, Secretary of the Buffalo Society of Natural Sciences. These Lectures were delivered at the Central Museum Building, Eastern Parkway. Saturday afternoons.

Nov. 30—"Geysers of New Zealand."

Dec. 7—"Hawaii and the Volcano."

Dec. 14—"The Wonders of the Yellowstone."

Dec. 21—"Beyond the Rio Grande."

#### X. Five Single Illustrated Lectures.

Sept. 30—(Monday evening)—HENRY G. PEABODY, of San Francisco. Subject: "The Grand Canyon of the Colorado."

Nov. 30—(Saturday evening)—Rev. GEORGE KINNEY, of New York. Subject: "The Canadian Rockies."

Dec. 26—(Thursday evening)—STEPHEN C. ROGERS, of Lynn, Mass. Subject: "Afoot in the White Mountains."

Jan. 9—(Thursday evening)—Prof. HERSCHEL C. PARKER, Ph.D., of Columbia University. Subject: "Climbing Mt. McKinley."

May 27—(Tuesday evening)—HERBERT L. BRIDGMAN, M.A. Subject: "The International Geographical Congress at Rome, and Personal Experiences in the Balkan States."

XI. Oct. 26—Field Day of the Members of the Department in Commemoration of the 138th Anniversary of the Battle of White Plains. Stops were made at the Battle-field, New Rochelle and the Thomas Paine Home and Monument. Historical Address by EDWARD H. HALL, L.H.D.

XII. Five Single Lectures given at the various Branches.

- (a) FARNHAM BISHOP. See Huntington Branch.
- (b) ARTHUR STANLEY RIGGS, F.R.G.S. See Huntington and Garden City Branches.
- (c) JEROME H. RAYMOND, M.A., Ph.D. See Huntington, Jamaica and Garden City Branches.
- (d) TOYOKICHI IYENAGA, Ph.D. See Jamaica and Garden City Branches.
- (e) B. R. BAUMGARDT. See Jamaica Branch.

XIII. Seven Courses of Special Lectures under the joint auspices of the Departments of Geography and Photography.

(a) A Course of Five Saturday matinee and evening Lectures in the Music Hall, illustrated by colored lantern photographs and motion pictures, by NOX McCAIN, of Philadelphia.

Oct. 12—"Tunis, Carthage and the Sahara."

Oct. 19—"From Morocco to Malta."

Oct. 26—"Southern France."

Nov. 2—"Servia and Bulgaria."

Nov. 9—"The Golden West."

(b) A Course of five Tuesday Matinee and Evening Lectures in the Music Hall, illustrated by colored lantern

photographs and motion pictures, by E. M. NEWMAN, of Chicago.

- Nov. 19—"Holland—the Venice of the North."
- Nov. 26—"Rural France—Normandy and Brittany."
- Dec. 3—"Switzerland—Europe's Playground."
- Dec. 10—"Munich to Berlin—Eastern Germany."
- Dec. 17—"The Top of the World—Iceland; Spitzbergen and the North Cape."

(c) Three Illustrated Lectures on "The Discovery of the South Pole," by Capt. ROALD AMUNDSEN, of Norway, illustrated by motion pictures and lantern photographs.

Jan. 17—(Friday evening)—Opera House, Academy of Music.

Feb. 21—(Friday afternoon)—Opera House, Academy of Music.

Feb. 21—(Friday evening)—Music Hall, Academy of Music.

(d) Five Wednesday Matinee and Evening Lectures in the Music Hall, illustrated by colored lantern photographs and motion pictures, by BURTON HOLMES, of Chicago.

Jan. 15—"The West Indies."

Jan. 22—"The Panama Canal."

Jan. 29—"India: Bombay to Delhi."

Feb. 5—"India: The Taj to the Himalayas."

Feb. 12—"Burma and Ceylon."

(e) Two Additional Matinee and Evening Lectures in the Music Hall, by BURTON HOLMES.

Feb. 19—"The Panama Canal."

Feb. 26—"The Panama Canal."

(f) Five Saturday Matinee and Evening Lectures in the Music Hall, by HERBERT W. GLEASON, of Boston, on "Our Great National Parks," illustrated by colored lantern photographs and motion pictures.

Mar. 8—"Yellowstone and Wind Cave National Park."

Mar. 15—"Glacier National Park and the Olympic Mountains."

Mar. 22—"Mount Rainier and Crater Lake National Parks."

Mar. 29—"Yosemite, Sequoia and General Grant National Parks."

Apr. 5—"Grand Canyon of the Colorado, Mesa Verde and other Parks of the Southwest."

(g) Four Saturday Matinee and Evening Lectures in the Music Hall, by Mrs. HARRIET CHALMERS ADAMS, of Washington, D. C., on "South American Travel and Adventure," illustrated by colored lantern photographs and motion pictures.

Apr. 12—"Andean Travel and Adventure."

Apr. 26—"From Patagonia to Paraguay."

May 3—"From the Amazon to the Orinoco."

May 10—"Through the Caribbean Countries."

XIV. The Geographical Collections made chiefly by the Department are in part at the Central Museum and in part at the Children's Museum. Those at the Central Museum are in part on public exhibition and in part for reference and study. The Collections include upwards of fourteen hundred numbers, comprising maps, atlases, globes, reliefs, contour maps, models, telluria, text books, works of reference, books of travel, charts, surveys and other publications from the leading publishing houses of Germany, Switzerland, France, England, Holland, Italy, Austria, Russia, Sweden, Norway, Turkey and the Orient, together with the publications of the United States Coast and Geodetic Survey, the United States Topographical, Geological and Ethnological Surveys, State Surveys and other works published in the United States and Canada. This Geographical Col-

lection was begun by the Department in 1890-91 and is one of the most serviceable Geographical Collections in the United States.

## DEPARTMENT OF GEOLOGY.

### *Officers for 1913-1914*

Prof. JOHN MICKLEBOROUGH, Ph.D.	<i>President</i>
Prof. AMADEUS W. GRABAU, S.M., S.D.	<i>Vice-President</i>
WALLACE GOOLD LEVISON, B.Sc.	<i>Secretary</i>

### *Executive Committee*

Prof. JOHN MICKLEBOROUGH, Ph.D.	Prof. CHARLES P. BERKEY, Ph.D.
	THOMAS I. MILLER
Prof. HENRY S. OSBORN, Ph.D.	GEORGE E. ASHBY
Prof. AMADEUS W. GRABAU, S.M., S.D.	Prof. FRANKLIN W. HOOPER, LL.D.
Prof. JOHN S. MCKAY, Ph.D.	WALLACE G. LEVISON, B.Sc.
FREDERICK BRAUN	C. ROE GARDINER
	FREDERICK W. AGAR
	WILLIAM DILLER MATTHEW, Ph.D.

The Department of Geology was organized on December 18, 1888, with thirty-four members. Its present membership is one hundred and fifty.

The work of the Department has been as follows:

I. Four Illustrated Lectures on "The Evolution of Animal Life in Geological Times," by Prof. WILLIAM B. SCOTT, Ph.D., LL.D., of Princeton University, Monday evenings.

Nov. 25—"The Methods of Investigation."  
Dec. 2—"The History of the Horses; Tapirs; Rhinoceroses."

Dec. 9—"The History of the Camels and Ruminants."  
Dec. 16—"The History of the Beasts of Prey."

II. Four Illustrated Lectures on "Practical Problems in Geology and Mineralogy, by Prof. CHARLES P. BERKEY, Ph.D., of Columbia University, Monday evenings.

Oct. 21—"Applied Geology and Mineralogy."  
 Oct. 28—"Problems of a Geologic Nature."  
 Nov. 4—"Applied Petrology."  
 Nov. 11—"The Geologic Problems of the Catskill Aqueduct."

III. Four Illustrated Lectures on "The Evolution of Plant Life in Geologic Time," by ARTHUR HOLICK, Ph.D., of the New York Botanical Garden, Monday evenings.

Jan. 20—"Paleobotany in General: Definition and Scope: General Principles Involved: History of the Science."

Jan. 27—Paleobotany in its Relations to Geology; The Pre-Paleozoic and Paleozoic Floras."

Feb. 3—"Paleobotany in its Relations to Geology: The Post-Paleozoic Floras."

Feb. 10—"Paleobotany in its Relations to Botany: Morphology. Phylogeny. Taxonomy. Ecology."

IV. Three Conferences in the Science Room under the auspices of the Natural Science Committee, on Saturday evenings.

Dec. 14—Prof. CHARLES P. BERKEY, Ph.D., of Columbia University. Subject: "Genetic Distinctions in the Constituents of Rocks and Ores."

Feb. 1—Prof. WILLIAM O. CROSBY. Subject: "The Geological Relations of the Ground Water of Long Island." This paper was read by Mr. GEORGE E. ASHBY.

Mar. 22—GARDNER L. VAN DUSEN. Subject: "Helderberg Formation."

V. The Geological Collections of the Institute comprise the following: (1) A collection of lithological specimens representing the drift deposits of Long Island. (2) A collection of fossils found in the drift deposits of Long

Island. (3) A collection of lithological specimens representing the geological formations (including the drift deposits) on Manhattan Island. (4) A collection of lithological specimens representing the geological formations (including the trap rock of the Palisades) of New Jersey. (5) The GEBHARDT Collection representing the paleontology and lithology of Schoharie County, N. Y., described in the eleventh Year Book (1898-9). (6) A lithological collection representing the plutonic rocks of Germany deposited by the PRATT INSTITUTE. (7) A collection representing the coal plants of the Pennsylvania carboniferous rocks. (8) A general lithological collection representing typical rocks from various parts of the United States and Europe. (9) A collection of fossils from the geological formations in southern Germany. (10) A collection of fossil fishes presented by the Hon. EUGENE G. BLACKFORD in 1901. (11) A large collection of fossils from the formations in the State of New York made by Mr. FREDERICK BRAUN for the Museum.

V. The Department of Geology also has as a loan a fine collection in paleontology specially rich in fossil corals, fossil star-fishes and fossil sponges, loaned by Mr. FREDERICK BRAUN.

VI. The Skeleton of the Mastodon that was acquired at Newburgh on the Hudson in 1899 was mounted in the Natural History Gallery on the second floor of the Museum in March, 1901.

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This Department was organized on Friday, June 14, 1895, with a membership of one hundred and twenty-three. On January 27, 1896, the Executive Committee held its first meeting and appointed its Standing Committees. The first public meeting was held on Monday evening, March 30, 1896, and the opening address was delivered by the Hon. EDWARD J. PHELPS, LL.D., ex-Minister to Great Britain.

The present membership of the Department is two hundred and fifty-one.

The work of the Department has been as follows:

I. May 20—(Tuesday evening)—Address by the Hon. GEORGE W. KIRCHWEY, LL.D., of Columbia University. Subject: "The Courts and Social Progress."

II. A Course of Six "Law Lectures for Women," by

Mrs. CORNELIA K. HOOD, LL.B., of Brooklyn, Monday afternoons.

- Feb. 17—"The Obligation of Contracts."
- Feb. 24—"Financial Legislation."
- Mar. 3—"Last Will and Testament."
- Mar. 10—"The Surrogate's Court."
- Mar. 17—"Woman and Property."
- Mar. 24—"The State and the Law."

*Committee on Law Lectures for Women*

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Mrs. MARY S. CROXSON	Miss JULIA LATIMER
Mrs. SAMUEL BOWNE DURYEA	Miss HILDA LOINES
Miss MARY ORR	Miss HELEN H. MACOWAN
Mrs. ANDREW J. PERRY	Mrs. M. E. NEUBERT
Mrs. CHARLES SILVER	Mrs. GEORGE W. SMITH

The Law Department is engaged in making a collection of portraits and busts of eminent jurists and lawyers, and also a collection of rare legal books and papers associated with the study and practice of law which may have an historical or personal value. The presentation of the portraits as stated above marks the beginning of Museum collections in the Law Department.

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The organization of this Department was effected on May 23, 1890, with a membership of twenty-five. The present membership is one hundred and three.

The work of the Department has been as follows:

I. Six Single Saturday Evening Lectures.

Nov. 9—Prof. EDWARD KASNER, Ph.D., of Columbia University. Subject: "Unsolved Problems of Mathematics."

Dec. 21—Prof. OSWALD VEBLEN, Ph.D., of Princeton University. Subject: "Foundations of Mathematics."

Jan. 11—Prof. DAVID EUGENE SMITH, Ph.D., of Columbia University. Subject: "The International Congress of Mathematicians."

Feb. 8—Prof. JOSEPH BOWDEN, Ph.D., of Adelphi College. Subject: "The Tyranny of Ten."

Mar. 29—Prof. FREDERICK N. WILLSON, C.E., M.A., of Princeton. Subject: "The Mathematics of Graphics."

Apr. 26—Prof. L. LELAND LOCKE, M.A., of the Brooklyn Training School for Teachers. Subject. "Des Cartes."

II. Five Illustrated Conferences on "Mathematical Astronomy," by GARRETT P. SERVISS, B.S., Friday evenings, beginning February 7. For Subjects of these Conferences see Department of Astronomy.

III. A Course of Instruction in "The Teaching of Elementary Mathematics," conducted by Prof. M. A. BAILEY, M.A., of the New York Training School for Teachers, thirty sessions of one hour each, Tuesday evenings, beginning October 8, Art Building, 174 Montague Street.

### DEPARTMENT OF MICROSCOPY

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Mrs. JOHN J. SCHOONHOVEN, M.L.	EDGAR W. OLIVE, Ph.D.
	Prof. WARD MCNEIL, M.D., Ph.D.

This Department was organized by the Brooklyn Microscopical Society in April, 1888, with a membership of sixty-eight, and is the oldest in the Institute. Its present membership is ninety-three.

The work of the Department has been as follows:

I. Five Single Lectures at the regular Friday evening Meetings of the Department.

Oct. 4—A. TRAEGER, of the House of Ernst Leitz, New York. Subject: "The Development of Scientific Optics and their Application to Photo-Micrography of Bacteria, and the new Developments of Micro-Cinematography," illustrated by the Projectoscope and by new apparatus.

Dec. 6—JOHN J. SCHOONHOVEN, M.A., President of the Department of Zoology. Subject: "Insects as the Cause and as Carriers of Disease. A Study in Micro-biology."

Jan. 3—Prof. H. H. RUSBY, Ph.D., of the New York Botanical Garden. Subject: "The Microscopical Examination of Foods to Determine Their Purity."

Feb. 7—Prof. SIMON H. GAGE, B.S., of Cornell University. Subject: "The Use of the Microscope in the Past and in the Present."

Apr. 4—ELIHU CHURCH, Secretary of the Department of Water Supply, Gas and Electricity, New York City. Subject: "Brooklyn's Water Supply."

## II. Four Single Conferences on Friday evenings.

Oct. 18—HENRY S. WOODMAN. Subject: "Methods of Preparing and Mounting Insect Preparations."

Dec. 20—FREDERICK W. APGAR, Member of the Executive Committee. Subject: "The Use of the Microscope in Mining Engineering."

Feb. 21—Joint Conference. L. C. HIMEBAUGH, of the Lederle Laboratories. Subject: "The Use of the Microscope in Industrial Bacteriology." P. POETSCHKE, of the Lederle Laboratories. Subject: "The Use of the Microscope in Industrial Chemistry."

May 16—JAMES WALKER, Member of the Executive Committee. Subject: "Pond Life."

III. Nov. 15—(Friday evening)—An Exhibition by Members of the Department, of recently mounted slides with descriptions of specimens and methods of mounting. Science Room, Academy of Music.

## IV. ANNUAL EXHIBITION.

The Twenty-sixth Annual Microscopical Exhibition was held in the Art Gallery, 174 Montague Street, on Friday evening, March 7 and Saturday evening, March 8. The evening of Friday was reserved for a private view by Members of the Department and their invited guests. The Exhibition was open to all Members of the Institute on Saturday evening.

The Exhibitors were:

A. E. ANDERSON, FREDERICK W. APGAR, GEORGE E. ASHBY, WILLIAM T. BATHER, BAUSCH & LOMB OPTICAL COMPANY, EDWARD F. BIGELOW, J. EDDY BLAKE, M.D., BROOKLYN BOTANIC GARDEN, WILLIAM G. BOWDOIN, WILLIAM M. BUTTERFIELD, ALBERT COMSTOCK, CLEMENT B. DAVIS, EIMER & AMEND, JOHN A. GRENZIG, ROBERT HAGELSTEIN, HOAGLAND LABORATORY, HENRY C. JENKINS,

WILLIAM KIENLE, LOUIS G. KOLB, O. IVAN LEE, ERNST LEITZ, WALLACE GOOLD LEVISON, LIONEL F. LIEBSCHUTZ, MISS AGNES VINTON LUTHER, MATZINGER & BERG, JOHN McCALLUM, THOMAS I. MILLER, MOUNT PROSPECT LABORATORY, CHRIS E. OLSEN, CLAYTON A. PETERS, SIDNEY I. ROSENBLUM, J. A. SAUNDERS, PRATT INSTITUTE, JOHN J. SCHOONHOVEN, L. E. TIESTE, M.D., Miss ISABEL H. TUTHILL, G. L. VAN DUSEN, BENJAMIN T. VAN NOSTRAND, JAMES WALKER, FREDERICK W. WEAVER, SILAS C. WHEAT, J. P. WINTRINGHAM, ARTHUR KING WOOD, H. S. WOODMAN.

The number of exhibits was ninety-seven.

#### V. Instruments and Collections for use at meetings of the Department.

The Department has two BAUSCH & LOMB stands (purchased by the Department), one ZENTMAYER stand and one ACME stand (loaned by Prof. F. W. HOOPER), an R. and J. BECK binocular stand (presented by EUGENE G. BLACKFORD)—all equipped with eye-pieces and objectives—a ZENTMAYER grand centennial binocular stand with all accessories, a dissecting microscope, a microtome, six bulls eye condensers (presented by Miss AGNES VINTON LUTHER), and many slides (gifts by HENRY T. CROSBY).

There are also valuable collections of accessories and an excellent library of interest to the microscopist.

Members are invited to add to the mounted microscopical preparations for the cabinet collection.

#### VI. The Stiles Collection.

To the collections and apparatus in Microscopy were added in 1902 the very valuable microscopical outfit of the late S. E. STILES, M.D., formerly President and for many years an active and very useful and much honored Member of the Department. The collection comprises some 1,100 very excellent microscopical preparations and a compound

microscope with many attachments, including a fine polariscope.

### VII. The Briggs Collection.

During the Season 1908-09 there was purchased by the Department of Microscopy from Mrs. BRIGGS many books, slides, and pieces of apparatus, as follows:

1. A Beck binocular microscope, with revolving graduated mechanical stage.
2. Six eye pieces.
3. Ten objectives, varying from 3" to 1-15".
4. An achromatic condenser.
5. An extra large polarizer and analyser with set of three DARKER revolving selenites and other accessories.
6. About 3,000 microscopic objects, mounted and labeled.
7. Rosewood case with drawers containing the microscopic slides.
8. A library consisting of books and pamphlets.

VIII. The new Projection Lantern was ordered in June, 1909, from ERNST LEITZ, of New York, and was imported and ready for use in the autumn. The lantern is of German manufacture, is one of the most complete so far made and includes as attachments a Projectoscope, Polariscopic and Microscope. This lantern has been of very great value to the scientific departments meeting in the Science Room during the past three seasons. A second LEITZ Projectoscope has been purchased in 1912 for use in the Lecture Hall.

IX. The new EDINGER PROJECTING AND DRAWING APPARATUS ordered in June, 1910, was received from ERNST LEITZ in October of that year and has been installed in the Science Room.

## DEPARTMENT OF MINERALOGY

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CHARLES P. BERKEY, Ph.D.	

The Department of Mineralogy was organized on November 21, 1888, with twenty-eight members. The present membership is seventy-eight.

The work of the Department has been as follows:

I. Four Illustrated Lectures on "Practical Problems in Geology and Mineralogy," by Prof. CHARLES P. BERKEY, Ph.D., of Columbia University, Monday evenings, beginning October 21. For subjects of these Lectures see Department of Geology.

II. Five Single Illustrated Lectures on Friday evenings.  
Oct. 11—Prof. ALEXIS A. JULIEN, Ph.D., of Columbia University. Subject: "Eozoon: Past Vagaries Concerning its Formation and a New View of its Origin and Nature."

Nov. 8—J. P. WINTRINGHAM. Subject: "The GEORGE L. ENGLISH Collection Illustrating the Characters of Minerals."

Jan 10—Prof. J. VOLNEY LEWIS, of Rutgers College. Subject: "Corundum—its Geology and Mineralogy."

Mar. 14—Prof. EDGAR T. WHERRY, of Lehigh University. Subject: "Recent Studies on the Geology and Mineralogy of Pennsylvania."

Apr. 11—DOUGLASS B. STERRETT, Associate Geologist, United States Geological Survey, Washington, D. C. Subject: "Precious Stones."

III. Seven Illustrated Conferences on Friday evenings.

Nov. 1—Opening Conference of the Season. Exhibition by Members of the Department of Minerals recently collected.

Nov. 22—C. ROE GARDINER, President of the Department. Subject: "Emeralds."

Jan. 24—J. P. WINTRINGHAM. Subject: "The Obsidians, Felsites, Rhyolites, Rhyolite-Porphyry and Granites."

Feb. 28—A. E. ANDERSON, of the American Museum of Natural History. Subject: "The Orthoclastic or Potash-Soda Division of Rocks; Their History, Structure and Relationships."

Mar. 28—GEORGE E. ASHBY. Subject: "The Andesites and Diorites, their Varieties and Relations."

Apr. 25—J. P. WINTRINGHAM. Subject: "Scoria, Aphanite, Basalt, Basalt-Porphyry and Gabbros."

May 23—ALFRED C. HAWKINS, of Brown University. Subject: "The Mineralogy of Rhode Island."

IV. Two Conferences in the Science Room on Saturday evenings under the auspices of the Natural Science Committee.

Oct. 5—Prof. DANIEL S. MARTIN, M.A., of Brooklyn. Subject: "The Geology and Mineralogy of New York City."

Mar. 22—GARDNER L. VAN DUSEN. Subject: "The Helderberg Formation."

V. The Mineral Collections of the Institute have been increased during recent years by the gifts of beauti-

ful, large, rare and instructive specimens, and the collections will be further enriched during the coming season. Those specimens that are most suitable for public exhibition have been placed in glass cases in the Museum Building and in the Children's Museum, Bedford Park. Other specimens are arranged for reference in closed cases, and still others await case room for their display.

The Children's Museum contains good collections of Minerals and Rocks, to which additions are made each year.

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 H. BROOKS DAY

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 WARREN E. HEDDEN  
 WILLIAM A. THAYER  
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This Department was organized on November 27, 1891, with fifty-four members. The present membership is twenty-five hundred and eighty-six.

The work of the Department has been as follows:

## I. ORCHESTRAL CONCERTS.

A. A Series of five Friday evening concerts in the Opera House, Academy of Music by the BOSTON SYMPHONY ORCHESTRA, one hundred musicians, Dr. KARL MUCK, Conductor, under the auspices of the Department of Music of the Institute and the Brooklyn Philharmonic Society, JOHN E. LEECH, President. The dates and assisting artists were as follows:

Nov. 8—Welcome to Dr. KARL MUCK.

Dec. 6—FRITZ KREISLER, violin.

Jan. 10—Mme. ELENA GERHARDT, soprano.

Feb. 21—MAX PAUER, violin.

Mar. 21—OTTO URACK, 'cello.

B. A series of five Young People's concerts on Saturday afternoons in the Opera House, Academy of Music, by

the NEW YORK SYMPHONY ORCHESTRA, WALTER DAM-ROSCH, Conductor, under the Auspices of the Brooklyn Symphony Society and the Department of Music. The dates and assisting artists were as follows:

Nov. 9—EDNA BLANCHE SHOWALTER, soprano; ALEXANDER SASLAVSKY, violin.

Dec. 7—Mme. CORNELIA RIDER POSSART, piano.

Jan. 11—MISCHA ELMAN, violin.

Feb. 1—Folk Music and Folk Dancing. Dancers in National Costumes of Sweden, Norway, Ireland and Russia.

Mar. 8—WAGNER programme.

C. Third Annual Concert by the Students of the Brooklyn Institute Orchestra, ARNOLD VOLPÈ, Conductor, in the Music Hall, Academy of Music, Sunday afternoon, May 11, assisted by Miss SARAH CORE, soprano; MISCHEL GUSIKOFF, violin.

D. The HUTINGTON Orchestra, Rev. CHARLES E. CRAGG, Conductor. See Huntington Branch.

## II. CHORAL CONCERTS.

A. May 18—(Sunday afternoon)—Fifth Annual Concert by the MONDAY EVENING SIGHT SINGING CLASSES of the BROOKLYN INSTITUTE OF ARTS AND SCIENCES, assisted by Master ERNEST HAROLD HUDSON, soprano soloist of St. Luke's Church and the Quartette of the New York Avenue Methodist Episcopal Church, CARL G. SCHMIDT, Director. Miss HARRIET V. BROWN, soprano; Miss EMMA WILLIAMS, contralto; A. J. BELLENOIT, tenor; ROBERT C. LOWER, basso. H. BROOKS DAY, at the organ. Programme: "The Pilgrims," Sacred Cantata by HARRY ROWE SHELLEY. Music Hall, Academy of Music.

B. May 25—(Sunday afternoon)—Third Annual Concert and Demonstration by THE BROOKLYN INSTITUTE

THURSDAY EVENING SIGHT SINGING CLASSES, under the direction of WILBUR A. LUYSTER, assisted by Mrs. HELEN ATWOOD DAVIDSON, soprano; Miss JEANNE LITTLE, violin; SAMUEL WILENSKI, piano; HARRY ROWE WHITTAKER, piano; Miss JULIA Ross, at the organ. Music Hall, Academy of Music.

### III. CHAMBER MUSIC CONCERTS.

A. A Series of Three Concerts in the Music Hall, Academy of Music, by the FLONZALEY STRING QUARTETTE: ADOLFO BETTI, first violin; ALFREDPOCHON, second violin; Ugo Ara, viola; IWAN D'ARCHAMBEAU, 'cello, on the evenings of January 7, February 8 and March 14.

B. Six Chamber Music Concerts, in the Lecture Hall of the Academy of Music, by The Philharmonic Trio; illustrating "The Piano-Trio as developed by the German Classics and Modern Composers of Leading Nationalities," ALEXANDER RIHM, piano; MAURICE KAUFMAN, violin; JACQUES RENARD, 'cello. Saturday evenings, November 16, December 14, January 18, February 15, March 15, April 12.

C. Six Concerts at the Various Branches. TOLLEFSEN TRIO. See Huntington, Jamaica and Garden City Branches. THE PHILHARMONIC TRIO. See Huntington, Jamaica and Garden City Branches.

### IV. SONG RECITALS.

A. Oct. 17—(Thursday evening)—Mme. SCHUMANN-HEINK, Contralto; EDUARD COLLINS, Piano, Assisting Artist; Mrs. KATHERINE HOFFMANN, Accompanist. Opera House, Academy of Music.

B. Oct. 31—(Thursday evening)—Mme. LOUISE HOMER, Mezzo-soprano; Mrs. EDWIN N. LAPHAM, Ac-

companist; R. HUNTINGTON WOODMAN, at the Organ. Opera House, Academy of Music.

C. Jan. 16—(Thursday evening)—Joint Recital by Mme. CLARA BUTT, Soprano and KENNERLEY RUMFORD, Barytone; HAROLD CRAXTON, Accompanist; WARREN R. HEDDEN, at the Organ. Opera House, Academy of Music.

D. Feb. 6—(Thursday evening)—DAVID BISPHAM, Barytone; HARRY M. GILBERT, Pianist; WOODRUFF ROGERS, at the Organ.

E. Feb. 13—(Thursday evening)—Joint Recital by Mme. HILDEGARD HOFFMANN HUSS, Soprano, and HENRY HOLDEN HUSS, Piano, assisted by Miss LILLIAN LITTLEHALES, 'Cello; Miss FLORENCE BECKWICK, Accompanist. Music Hall, Academy of Music.

F. Eleven Recitals at the Various Branches.

MADRIGAL QUARTETTE of New York. See Huntington, Jamaica and Garden City Branches.

PAUL DUFault, Tenor. See Huntington, Jamaica and Garden City Branches.

Mr. and Mrs. HENRY HOLDEN HUSS. See Huntington and Jamaica Branches.

Miss LAURA LOUISE COMBS, Soprano; EDWIN O. SWAIN, Barytone. See Huntington, Jamaica and Garden City Branches.

## V. VIOLIN RECITALS.

A. Dec. 12—(Thursday evening)—MISCHA ELMAN; PERCY KAHN, Accompanist. Opera House, Academy of Music.

B. Jan. 30—(Thursday evening)—LOUIS PERSINGER; SAMUEL CHOTZINOFF, Accompanist. Opera House, Academy of Music.

## VI. LECTURE RECITALS.

A. Five Lecture Recitals on the Programmes of the Philharmonic Concerts as rendered by the BOSTON SYMPHONY ORCHESTRA. Thursday afternoons, Lecture Hall, Academy of Music.

Nov. 7—LOUIS C. ELSON, of Boston; ALFRED DE VOTO, Assisting Artist.

Dec. 5—DANIEL GREGORY MASON, of New York.

Jan. 9—N. J. COREY, of Detroit.

Feb. 20—LOUIS C. ELSON, of Boston; ALFRED DE VOTO, Assisting Artist.

Mar. 20—CARL FIQUÉ, of Brooklyn.

B. Six Lecture Recitals on "Important Chapters in Musical History (Tenth Series)," by CARL FIQUÉ, Conductor of the United German Singing Societies of Brooklyn, Tuesday evenings, Music Hall.

Oct. 1—"Parsifal." Music Drama by RICHARD WAGNER. Musical and Dramatic Review. (RICHARD WAGNER, 1813-1883.)

Oct. 8—"The Mozart Sonata." An Excursion into Beauty Land. (Wolfgang Amadeus Mozart, 1756-1791.)

Oct. 15—"The Merry Wives of Windsor," by OTTO NICOLAI (1810-1849). A Bright Example of Comedy Opera.

Oct. 22—"New Ideas in Olden Times." Progress and Realism, by Composers of the 16th, 17th and 18th Centuries.

Oct. 29—"Tiefland" (The Low Land). A Spanish Romance. Music Drama, by EUGENE D'ALBERT (1864).

Nov. 5—"The Picturesque in ROBERT SCHUMANN'S Piano Music." Scenes from Childhood (1838). The Carnival (1834).

C. Six Lecture Recitals on "The Compositions of Brahms," by DANIEL GREGORY MASON, of New York, Tuesday evenings, Music Hall.

Jan. 6—(Monday evening)—"His Piano Compositions." Mr. MASON at the Piano.

Jan. 14—"His Violin Sonatas," assisted by EDOUARD DETHIER, Violin; Mr. MASON, Piano.

Jan. 21—"The Songs of Brahms," assisted by CHARLES RABOLD, Barytone; Mr. MASON, Piano.

Jan. 28—"The Clarinet Sonatas," assisted by CARL E. REINECKE, Clarinet; Mr. MASON, Piano.

Feb. 4—"Selections from his Orchestral Works," assisted by GASTON M. DETHIER, Piano.

Feb. 11—"Brahms' Chamber Music," assisted by CARL REINECKE, Clarinet, and BERNARD KALKHOF, 'Cello.

D. Three Lecture Recitals on "Wagnerian Compositions," by CARL FIQUÉ, Monday evenings in the Music Hall.

Feb. 17—"Rienzi."

Feb. 24—"The Flying Dutchman."

Mar. 3—"Tannhäuser."

E. Eight Lecture Recitals on "The Music Dramas of Richard Wagner," in Celebration of the 100th Anniversary of the Birthday of RICHARD WAGNER, by THOMAS A. HUMASON, Ph.D., of Brooklyn, Music Hall, Monday evenings.

Mar. 10—"Lohengrin."

Mar. 17—"Das Rheingold."

Mar. 24—"Die Walküre."

Mar. 31—"Siegfried."

Apr. 7—"Die Götterdämmerung."

Apr. 21—"Tristan and Isolde."

Apr. 28—"Die Meistersinger."

May 5—"Parsifal."

F. Three Lecture Recitals on "The Violin Sonatas of Mozart, Rubinstein and Raff," by ARTHUR ROWE POLLOCK, of Brooklyn, Piano, assisted by Miss LOTTA DAVIDSON, Violin. Lecture Hall, Wednesday afternoons.

Apr. 30—"Mozart: Sonata No. 12, E flat."

May 7—"Rubinstein: Sonata, Opus 49 for Viola and Piano.

May 14—"Raff: Sonata No. 1, Opus 73, E Minor."

G. Two Lecture Recitals on "Folk Music and Folk Dancing of Europe and America," by Mrs. ALEXINA CARTER BARRELL, Mezzo-soprano, assisted by NATHAN HASKELL DOLE, Lecturer; MELVILLE CARLTON, Piano, Miss ALICE BARNARD DIAZ and Miss LUCILLE PERRY HALL, Dancers. Lecture Hall, Academy of Music, Wednesday evenings, May 14 and 21.

H. Lecture Recital by CARL FIQUÉ. See Huntington Branch.

#### VII. ORGAN RECITALS.

A. Five brief Organ Recitals by SCOTT WHEELER, in the Music Hall, Sunday afternoons, beginning October 6. These Recitals preceded the Readings by Miss ALICE CHAPMAN, of Boston.

B. Five Organ Recitals under the joint auspices of the INSTITUTE and the Clinton Avenue Congregational Church, by HERBERT STAVELY SAMMOND. These Recitals were given in the Clinton Avenue Congregational Church. Dates and assisting artists as follows:

Feb. 18—(Tuesday)—Miss MARGUERITE C. DUNLAP, Contralto.

Feb. 25—(Tuesday)—FORREST R. LAMONT, Tenor.

Mar. 4—(Tuesday)—ALVAH NICHOLS, Barytone.

Mar. 11—(Tuesday)—Miss JEANNE LITTLE, Violin.

Mar. 20—(Thursday)—Miss ALICE RALPH, Soprano, and the Choir of the Clinton Avenue Congregational Church.

## VIII. COURSES OF INSTRUCTION.

A. A Course in Sight Singing, CARL G. SCHMIDT, Instructor, on successive Monday evenings, beginning October 7. On May 18 a concert was given in the Music Hall. See Choral Concerts.

B. Beginners' Course in Sight Singing, WILBUR A. LUYSTER, Instructor, on successive Thursday evenings at 7.30 o'clock, beginning October 10.

C. Advanced Sight Singing Class, WILBUR A. LUYSTER, Instructor, on Thursday evenings, at 8.30 o'clock, beginning October 10. On May 25 a concert was given in the Music Hall. See Choral Concerts.

D. An Orchestral Class for Men and Women under the direction of ARNOLD VOLPE, on successive Monday evenings, beginning October 7, at the Art Building. On May 11 a concert was given by the Students in the Music Hall. See Orchestral Concerts.

IX. The LIBRARY of the Department of Music has received a most valuable donation from the BROOKLYN PHILHARMONIC SOCIETY, comprising six thousand six hundred and ten bound volumes of musical compositions in sets, for the use of choruses in rendering oratorios and other choral works. Other additions to the Library are needed, and especially in the direction of Orchestral and Oratorio Scores, that will enable the Institute to present to the public music of the highest standing.

The late JAMES A. H. BELL, Life Member of the Institute, presented his Library of Musical Compositions to the Institute in 1899. The Library contains a large number of works, and is accompanied by a complete catalogue.

## DEPARTMENT OF PAINTING

*Officers for 1913-1914*

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 S. F. KNEELAND  
 Miss S. M. BARSTOW

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*Second Vice-President*  
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*Executive Committee*

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 Miss S. M. BARSTOW  
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 Miss ELEANOR C. BANNISTER

The Department of Painting was organized on May 26, 1890, with forty-four members. The present membership is three hundred and nine.

The DEPARTMENT OF PAINTING is especially interested in providing the means for Art Instruction for students of merit, and to this end it has co-operated with the BROOKLYN ART ASSOCIATION in establishing and maintaining the EVENING ART CLASSES.

The work of the Department has been as follows:

I. THE EVENING ART CLASS; JOSEPH H. BOSTON,  
 INSTRUCTOR

This class was conducted for the purpose of furnishing instruction in Drawing, Painting and Composition of a high and thorough character.

The Studio Work comprised Drawing from the Antique, and Drawing and Painting from Life. The class was conducted in accordance with the methods pursued by the best Art Schools in Europe, and by the Art Students' League in New York. The students worked five evenings each week, beginning in October and ending in May.

Applicants to the Life and Painting Classes must submit drawings from cast or life. No examination is required for

admission to the Antique Class. Promotion from the Antique Class is made with the approval of the Instructor, and is based upon the individual merit of the student's work. Students may register at any time.

Students who do not pay for a year's instruction in advance are required to pay for as many Quarters as they are present. When a student enters more than one class a reduction is made in the tuition. Tuitions by the Quarter are also payable strictly in advance.

For further information concerning the Art Classes, inquire of the Instructor at the School, or at the office of the Institute. See also Department of Fine Arts.

II. Six Illustrated Lectures on "German and Spanish Art," by Miss HARRIETTE H. WINSLOW, of Buffalo, N. Y., Friday afternoons.

Feb. 14—"The Catholic Art of Germany."

Feb. 21—"Albrecht Dürer."

Feb. 28—"Hans Holbein."

Mar. 7—"The Spanish School before Velasquez."

Mar. 14—"Velasquez and the Royal Art of Spain."

Mar. 21—"Murillo, the Favorite of the People."

III. The Collections of Paintings at the Museum Building are on exhibition in the galleries on the third floors, from 9 A. M. until 6 P. M. each week day, from 7.30 until 9.45 on Thursday evenings, and from 2 until 6 on Sunday afternoons. Admission to the galleries of paintings is free on all days except Mondays and Tuesdays, when the admission to the Museum is 25 cents for adults and 10 cents for children under sixteen years of age.

IV. The Collections have received notable additions during the past year through the generosity of Members and friends of the Institute. Lists of the donations of the year are printed in this Year Book.

V. The TISSOT COLLECTION OF PICTURES presented to the Institute in 1900 was placed on exhibition in the Museum in May, 1901, and may be seen at all hours when the Museum is open to the public.

VI. The JOHN S. SARGENT COLLECTION OF PAINTINGS comprises eighty-three water-colors by Mr. SARGENT, purchased from him by the Institute in March, 1909, and hung in one of the galleries of paintings in May of the same year.

VII. The WINSLOW HOMER COLLECTION of thirteen water color paintings presented by Members of the Institute in 1912.

Other Collections of Paintings are enumerated under the Department of Fine Arts.

### DEPARTMENT OF PEDAGOGY

#### *Officers for 1913-1914*

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Prin. HOMER C. BRISTOL, Ph.D.	<i>First Vice-President</i>
Prin. WILLIAM J. MORRISON, Ph.D.	<i>Second Vice-President</i>
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Prin. CHARLES PERRINE	Prin. LEWIS H. TUTHILL
Prin. DeFOREST A. PRESTON	Dist. Supt. BENJAMIN VEIT
Prin. JAMES J. REYNOLDS	Miss CAROLINE M. WALLOSTON
Prin. SARAH L. RHODES	Prin. HELEN E. WARNER
Prin. FRANK ROLLINS	Prin. LA SALLE H. WHITE, Ph.D.
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Prin. FLOYD R. SMITH	Prin. MARGARET S. WINSLOW
Miss ALMEDA SPRAGUE	Prin. JOSEPH V. WITHERBEE

*Committee on Library and Museum*

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ARTHUR H. FLINT	THOMAS R. PICKREL
Miss MAUD GARDNER	Miss KATE C. SIMMONS
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Miss ADA M. MOSELEY	Miss FRANCES H. FLAGLER

The Department of Pedagogy was organized on February 26, 1892, with a membership of one hundred and fifty-eight. Its present membership is six hundred and eighty-four.

The purpose of the Department, as expressed in its Constitution, is "to promote knowledge of the science and the art of education." The work of the Department comprises:

1. Addresses on educational questions of large and general import.
2. General courses of lectures on subjects in the curricula of studies and on the methods of teaching.
3. Systematic courses of instruction, with directions for reading and study.
4. Conferences and object lessons in teaching.
5. The establishment of a Library of Pedagogy.
6. The Formation of a Pedagogical Museum as a part of the Museum of Arts and Sciences.

The work as above designated is conducted by the Executive Board and by the following Standing Committees:

1. Committee on Library and Museum.
2. Committee on Educational Psychology.
3. Committee on Art Education.
4. Committee on Kindergarten.
5. Committee on Physical Culture.
6. Committee on THE SCHOOL OF PEDAGOGY.

Each committee has regularly appointed meetings for the consideration of matters pertaining to its own individual work, and members are cordially invited to become active members of such committees as they may elect.

The work of the Department has been as follows:

I. Two Addresses.

Dec. 11—(Wednesday evening)—Pres. JOHN GRIER HIBBEN, LL.D., of Princeton University. Subject: "The

Functions of the University in our American Commonwealth."

Dec. 20—(Friday evening)—Pres. ALEXANDER MEIKLEJOHN, Ph.D., LL.D., of Amherst College. Subject: "The Functions of the College in our Country."

II. Five Lectures on "The Development of the Moral Nature," by Prof. EARL BARNES, Ph.D., of Philadelphia, Friday afternoons.

Sept. 27—"Moral Beginnings and Babyhood; Inheritance and Reflexes."

Oct. 11—"Right and Wrong in Infancy; Obedience and Caprice."

Oct. 18—"The Code of Ethics in Childhood; Animal Impulses and Human Ideals."

Oct. 25—"The Transition Time in Beliefs: Through Storm and Trouble."

Nov. 1—"The Aspirations and Struggles of Youth; The Peace of Righteousness."

III. Three Lectures on "The Education of Backward Children," by HENRY H. GODDARD, M.D., of Vineland, N. J., Monday afternoons, beginning September 30. For subjects of these Lectures see Department of Sociology.

IV. Eight Lectures on "The Philosophy of Education," by Prof. EDWARD HOWARD GRIGGS, M.A., L.H.D., President of the Department of Philosophy, Monday evenings, beginning September 30. For subjects of these Lectures see Department of Philosophy.

V. Six Lectures on "The Spirit of American Poetry," by Prof. HENRY VAN DYKE, D.D., LL.D., of Princeton University, Monday evenings, beginning November 25. For subjects of these Lectures see Department of Philology.

VI. Five Lectures on "The Art of Teaching," by Prof. HERMAN H. HORNE, Ph.D., of the School of Pedagogy, New York University, Wednesday evenings.

- Mar. 26—"Teaching as a Fine Art."
- Apr. 2—"The Art of Study."
- Apr. 9—"The Art of Questioning."
- Apr. 16—"The Art of Story-Telling."
- Apr. 23—"Our Educational Faith."

VII. Six Lectures on "The Teaching of Elementary Mathematics," by Prof. M. A. BAILEY, of the New York Training School for Teachers, Tuesday evenings.

- Apr. 15—"Factoring."
- Apr. 22—"Common Fractions."
- Apr. 29—"Decimals."
- May 6—"Denominate Numbers."
- May 13—"Fractional Relations."
- May 20—"Percentage."

VIII. Four Lectures on "The Applications of Psychology in Education," by Prof. JAMES E. LOUGH, Ph.D., of the School of Pedagogy, New York University, Monday evenings.

- Apr. 28—"Education of the Intellect."
- May 5—"Education of the Emotions."
- May 12—"Education of the Will."
- May 19—"Educational Values."

IX. Two Lectures on "General Method," by Prof. THOMAS M. BALLIET, Ph.D., of the School of Pedagogy, New York University, Friday afternoons.

- May 9—"The Specific Function of Play and Work in Education."
- May 16—"Interest."

## X. SECTION ON ART EDUCATION.

Special Courses of Instruction in Applied Design, Arts and Crafts, Drawing and Construction were conducted at the Art Building, by Miss EVALYN M. GRISWOLD and Mrs. ABBY R. HOBGOOD. These courses are fully announced under the Department of Fine Arts.

## XI. THE CULTURE OF THE HEALTH.

Courses of Instruction in the Culture of the Health and Self-Expression, by Mrs. CLARA Z. MOORE, of New York. Fifteen sessions of one hour each, two sessions of each class per week.

Autumn Course beginning October 15.

Morning Class (Beginners), 10.30 to 11.30, Tuesdays and Thursdays.

Afternoon Classes (Beginners), 4 to 5, Tuesdays and Thursdays.

Advanced Classes, 5 to 6, Tuesdays and Thursdays.

Evening Classes (Beginners), 8 to 9, Tuesdays and Thursdays.

Winter Course beginning January 14.

Morning Classes (Beginners), Tuesdays and Thursdays, 10.30 to 11.30.

Afternoon Classes (Beginners), Tuesdays and Thursdays, 4 P. M.

Evening Classes (Beginners), Tuesdays and Thursdays, 8 P. M.

Morning Class (Advanced), Wednesdays and Fridays, 10.30 A. M.

Afternoon Class (Advanced), Tuesday and Thursday, 5 P. M.

XI. Three Lectures on "Health and Self-Expression," by Mrs. CLARA Z. MOORE, of New York.

Oct. 10—(Thursday afternoon)—“Ways and Means to Higher Ideals.”

Oct. 14—(Monday afternoon)—“Health and Mental Efficiency.”

Jan. 13—(Monday evening)—“Concerning Health and Efficiency.”

## XII. PEDAGOGICAL LIBRARY AND MUSEUM.

The Section on Pedagogical Library and Museum, Principal JAMES CRUIKSHANK, LL.D., Chairman, has collected, classified and arranged for permanent preservation many school and college text-books, pieces of apparatus, and other educational appliances both current and such as are no longer in use—the latter especially as an historical record of educational progress. School reports, journals, published addresses and essays, catalogues and courses of study have places in the collection.

## THE SCHOOL OF PEDAGOGY

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During the school year of 1897-1898 the Institute was in the receipt of a large number of inquiries, by letter and in person, from teachers in Brooklyn who sought thorough systematic and high-grade work in the Principles of Education, the History of Education, Psychology as Applied to Teaching, School Management and Discipline, the Elements of Psychology, English Literature, and other subjects, a fuller knowledge of which would be helpful to them in their school work and in enabling them to secure advancement in the grade of their work. These inquiries were followed by a communication, signed by many teachers, petitioning the Institute to establish such Courses of Instruction as are mentioned above.

The several communications were referred to the Departments of Pedagogy and Psychology, by the authority of which a joint committee was appointed to prepare a plan for the establishment of a School of Pedagogy. This Committee consisted of Principal ALMON G. MERWIN, Pd.D., Chairman; Principal WILLIAM L. FELTER, Ph.D., LL.D., Associate Superintendent CLARENCE E. MELENEY, Associate Superintendent EDGAR DUBS SHIMER, Ph.D., Associate Superintendent JAMES M. EDSALL, Professor FREDERICK W. OSBORN, M.A., Professor WALTER L. HERVEY, Ph.D., Miss SARAH E. SCOTT, Miss EMMA L. JOHNSTON, Principals L. H. WHITE, Ph.D., WILLIAM L. SPRAGUE and WILLIAM McANDREW. The Committee had many meetings, obtained courses of study from the better Schools of Pedagogy in the country, conferred with President SETH Low, LL.D., of Columbia University, and Prof. JAMES E. RUSSELL, Ph.D., Dean, and members of the Faculty of Teachers College of Columbia University; with Prof. EDWARD R. SHAW, Ph.D., and Prof. EDWARD F. BUCHNER, Ph.D., of the School of Pedagogy of New York University;

with EDWARD G. WARD then Superintendent of the Brooklyn Schools, and with Superintendent WILLIAM H. MAXWELL, Ph.D., of the New York Public Schools.

The plan prepared was afterwards approved by the Departments of Pedagogy and Psychology, and by the Governing Boards of the Institute, Columbia University and the University of New York, respectively. The courses of instruction were given in Brooklyn with the co-operation of Teachers College of Columbia University and the School of Pedagogy of New York University.

Six Courses of Instruction were conducted during the year 1898-1899, twelve Courses in 1899-1900, fourteen Courses in 1900-1901, fourteen in 1901-1902, fifteen in 1902-1903, fifteen in 1903-1904, sixteen in 1904-1905, thirteen in 1905-1906, sixteen in 1906-1907, eleven in 1907-1908, nineteen in 1908-1909, eighteen in 1909-1910, seventeen in 1910-1911 and fourteen in 1911-1912. The number of persons registered in the twenty-four classes during the fifteenth or last year was 954 or an average of 48 in a class.

The Classes in the School of Pedagogy meet in the Academy of Music. The class rooms are provided with chairs, each having a book-rest suitable for use in taking notes.

#### COMMITTEE IN CHARGE OF THE SCHOOL OF PEDAGOGY

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Prin. HOMER C. BRISTOL, M.A.	Prin. JENNIE M. MACKAY
Dist. Supt. JAMES M. EDSELL	Dist. Supt. JAMES J. McCABE
Prin. WM. L. FELTER, Ph.D. LL.D.	Assoc. Supt. CLARENCE E.
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Prin. FREDERIC L. LUQUEER, Ph.D.	Prin. SARAH L. RHODES

Prin. FRANK ROLLINS	Dist. Supt. BENJAMIN VEIT
Prin. WILLIAM L. SPRAGUE	Prin. HELEN E. WARNER
Prin. JAMES SULLIVAN, Ph.D.	Prin. MARGARET S. WINSLOW
Prin. LEWIS H. TUTHILL, M.A.	Prin. JOSEPH V. WITHERBEE
Prof. WILLIAM J. TAYLOR, Ph.D.	

### CO-OPERATION.

The BROOKLYN TEACHERS ASSOCIATION, Prin. WILLIAM J. MORRISON, Ph.D., President, co-operated in maintaining various courses. Members of the BROOKLYN TEACHERS ASSOCIATION were admitted to the courses on the same terms as the members of the INSTITUTE.

### COURSES OF INSTRUCTION.

I. English Composition (Aa) conducted by CHARLES GALWEY, B.A. Thirty sessions of one hour each, Monday afternoons, beginning October 7.

II. Kindergarten Education and Primary Work, conducted by Miss JULIA WADE ABBOT, of Teachers College, Columbia University. Thirty sessions of one hour each, Wednesday afternoons, beginning October 2.

### COURSES OF INSTRUCTION

*In Co-operation with*

### THE SCHOOL OF PEDAGOGY, NEW YORK UNIVERSITY

III. General Method, conducted by Prof. THOMAS M. BALLIET, Ph.D., Dean of the School of Pedagogy, New York University. Thirty sessions, one hour each, Friday afternoons, beginning October 4.

IV. The Philosophy of Education, conducted by Prof. HERMAN H. HORNE, Ph.D., of the School of Pedagogy, New York University. Thirty sessions, one hour each, Wednesday evenings, beginning October 2.

V. Educational Psychology, conducted by Prof. JAMES E. LOUGH, Ph.D., of the School of Pedagogy, New York University. Thirty sessions, one hour each, Monday evenings, beginning October 7.

VI. Sociology, conducted by Prof. RUDOLPH M. BINDER, Ph.D., of New York University. Thirty sessions of one hour each, Wednesday evenings, beginning October 9.

VII. American History, conducted by J. HERBERT LOW, M.A., of Manual Training High School. Thirty sessions, one hour each, Tuesday afternoons, beginning October 8.

#### ADDITIONAL COURSES IN THE SCHOOL OF PEDAGOGY

VIII. Principles of Education, conducted by Prof. ERNEST HORN, of Columbia University. Thirty sessions of one hour each, Tuesday afternoons, beginning October 8.

IX. Theory and Practice of Teaching in Elementary Schools, conducted by Miss Lida B. Earhart, Ph.D., of New York. Thirty sessions of one hour each, Thursday afternoons, beginning October 10.

X. School and Class Management and Discipline, conducted by Prin. ARTHUR C. PERRY, Jr., Ph.D., of Public School, No. 85. Thirty sessions, one hour each, Thursday evenings, beginning October 10.

XI. English Literature, conducted by WILLIS BOUGHTON, Ph.D., of Erasmus Hall High School. Thirty sessions, one hour each, Monday afternoons, beginning October 7.

XII. The Romantic Movement in English Literature (as illustrated by authors of the 19th Century), conducted by WILLIS BOUGHTON, Ph.D. Thirty sessions, one hour each, Saturday mornings, beginning October 12.

XIII. American Literature, conducted by Miss HELEN DAWES BROWN, of New York City. Thirty sessions, one hour each, Friday afternoons, beginning October 4.

XIV. The Teaching of Elementary Mathematics, conducted by Prof. M. A. BAILEY, M.A., of the New York Training School for Teachers. Thirty sessions, one hour each, Tuesday evenings, beginning October 8.

XV. Drawing and Construction, conducted by Mrs. ABBY R. HOBGOOD. Thirty sessions of two hours each, Saturday mornings, beginning October 5.

XVI. The Appreciation of Modern Art, conducted by Prof. LEIGH HARRISON HUNT, M.A., of the College of the City of New York. Thirty sessions of one hour each, Monday afternoons, beginning October 7.

XVII. Courses in the Teaching of Oral English, conducted by HENRY GAINES HAWN, President of the Hawn School of Speech Arts, Carnegie Hall. Thirty sessions of one hour each, Tuesdays at 3, 4.15 and 8.15 o'clock, beginning October 8.

XVIII. Elementary Course in French, conducted by Prof. RAPHAËL D'AMOUR, M.A., of the Berkeley Institute. Sixty sessions, one and one-half hours each, Wednesday and Friday evenings, beginning October 9.

XIX. Intermediate Course in French, conducted by Prof. RAPHAËL D'AMOUR, M.A., of the Berkeley Institute. Thirty sessions, one hour each Tuesday evenings, beginning October 8.

XX. Advanced Course in French (Second Year), conducted by Prof. RAPHAËL D'AMOUR, of the Berkeley Institute. Thirty sessions, one hour each, Friday afternoons, beginning October 11.

XXI. Socialism, conducted by FLOYD J. MELVIN, Ph.D., of Commercial High School. Thirty sessions, one hour each, Friday evenings, beginning October 11.

**GENERAL INFORMATION CONCERNING THE SCHOOL OF  
PEDAGOGY**

Persons desiring to register for any Course of Instruction may do so at the office of the Institute, Academy of Music, Lafayette Avenue, between Flatbush Avenue and Fulton Street.

Certificates of attendance are issued to all persons who pursue courses of study in the School of Pedagogy.

Certificates are issued by the Institute to all persons who fulfill the requirements for admission to a course of study, who have an attendance of 90 per cent., and who complete the work of a course in a manner satisfactory to the Instructor.

Tuition fees must be paid in advance. For members of the Institute there is a reduction of \$1.00 in the amount of the fee for each thirty hours of instruction.

For blank forms of certificates of admission to classes in the School of Pedagogy, or for further information apply to FRANKLIN W. HOOPER, M.A., LL.D., at the Institute office, Academy of Music, Lafayette Avenue, between Flatbush Avenue and Fulton Street, between 9 A. M. and 12 M., or between 2 and 6 P. M.

NOTE.—The practice of paying 50 cents for the privilege of attending the first session is discontinued. All persons desiring to attend the sessions of a class must first register.

**SPECIAL RULES GOVERNING THE SCHOOL**

(1) Each applicant is required to fill out an application blank and to signify whether the applicant is a *Visiting* Member or *Regular* Member.

(2) Only Members of the Institute, that is, those who are enrolled as Members, are entitled to Members' reduction in Tuition Fee. The reduction does not apply to relatives or friends.

(3) *Course Tickets* will be issued only to those whose tuitions are paid, and these tickets will serve as a pass to the lectures and must be presented and punched at each session. No credit for attendance at any session will be allowed unless the ticket is punched for that session.

(4) Admission paid for one course will not be credited to any other course.

(5) Attendance on 90 per cent. of the sessions of a class is necessary to secure a credit certificate from the Institute.

(6) All payments of Tuition Fees should be made at the Treasurer's office, either in person or through the Post Office, by Check or Money Order.

(7) Students who are fifteen minutes late to a session will not be given credit for attendance at that session.

(8) No student may send a substitute on her Course ticket to any lecture unless special permission is granted, and no credit for attendance for that lecture will be given.

The Courses of Instruction in the Summer School at the BIOLOGICAL LABORATORY, Cold Spring Harbor, enumerated in the latter part of this Year Book, are established primarily for the benefit of teachers. Those in attendance for six weeks, and whose work is satisfactory to the Instructor, receive certificates of attendance and scholarship.

## DEPARTMENT OF PHILOLOGY

### *Officers for 1913-1914*

WILLIS BOUGHTON, Ph.D.	President
Prof. EDWIN A. GREENLAW, Ph.D.	Vice-President
Prof. R. J. H. GOTTHEIL, Ph.D.	Corresponding Sec'y
Miss JULIE ERNESTINE CAPPELLE	Recording Secretary

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PROF. J. W. ABERNETHY, Ph.D.	MRS. KATE UPSON CLARK
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(See German Section)

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	RABBI NATHAN KRASS, Litt.D.

The Department of Philology was organized on January 14, 1891, with ninety-two members. The present membership is fourteen hundred and eighty-six. The work of the Department has been conducted by the various standing committees of the organization, under the direction of the Executive Committee. The meetings and lectures of the

Department during the year are classified under the following sections:

- (a) English Language and Literature.
- (b) German Language and Literature.
- (c) French Language and Literature.
- (d) Greek Language and Literature.
- (e) Oriental Languages and Literatures.

**(a) ENGLISH LANGUAGE AND LITERATURE  
LECTURES**

I. Six Lectures on "Comparative Literature: Northern Europe," by **EMIL E. CAMERER**, M.A., LL.B., of the New York Preparatory School, Wednesday afternoons.

Sept. 25—"The Kalevala: The Resurrected Epic of Finland."

Oct. 2—"The Gaelic Sagas: The Legends of Cuchulian; the Fenian or Ossian Hero Tales."

Oct. 9—"The Volsunga Saga: The Herp Cycle of Iceland and Scandinavia."

Oct. 16—"The King Arthur Cycle: The Pagan Element."

Oct. 23—"The King Arthur Cycle: The Elements of Chivalry and Romance."

Oct. 30—"The King Arthur Cycle: The Religious Element."

II. Five Readings from the Bible and Related Literature, by **Miss ALICE CHAPMAN**, of Boston, Sunday afternoons, Music Hall. Each Reading was preceded by a brief organ recital by **SCOTT WHEELER**, Organist, of the Church of the Holy Communion.

Oct. 6—"David and Daniel," from the Bible. "Three Dreams in a Desert," by **OLIVE SCHREINER**.

Oct. 13—"The Lost Word" and "The Other Wise Man,"

by the Rev. HENRY VAN DYKE. "Mary Magdalene," from the Bible.

Oct. 20—"The Twenty-seventh Psalm" and "Esther," from the Bible. "The Hunter," by OLIVE SCHREINER.

Oct. 27—"The Drama of Paul," from the Bible.

Nov. 3—"Peter and the Christ" and "Man's Deliverance," from the Bible. "Saul," by ROBERT BROWNING.

III. Six Lectures (Fourth Series) on "The Ethics of the Modern Drama," by ALFRED H. BROWN, M.A., Wednesday evenings.

Nov. 13—"The Terrible Meek." Kennedy.

Nov. 20—"The War God." Zangwill.

Nov. 27—"The Light that Shines in Darkness." Tolstoy.

Dec. 4—"Bought and Paid For." Broadhurst.

Dec. 11—"The Three Daughters of Mons. Dupont." Brieux.

Dec. 18—"To-morrow." MacKaye.

IV. Five Lectures on "John Milton: The Last of the Elizabethans," by Mrs. FRANCES SQUIRE POTTER, of Minneapolis, Friday afternoons.

Nov. 15—"The Old Age of Queen Elizabeth."

Nov. 22—"Milton the Elizabethan."

Nov. 29—"Milton, the Cromwellian."

Dec. 13—"The Old Age of Milton."

Dec. 20—"Milton, the World Poet."

V. Six Lectures on "ROBERT BROWNING," by Prof. WILLIAM LYON PHELPS, Ph.D., of Yale University, Friday afternoons.

Nov. 15—"Life and Characteristics."

Nov. 22—"His Theory of Poetry."

Nov. 29—"Personal Poems."

Dec. 6—"His Dramatic Monologues."

Dec. 13—"His Optimism."

Dec. 20—"Browning's Poems of Paradox."

VI. Six Addresses on "Emerson and Carlyle," by Prof. BLISS PERRY, L.H.D., LL.D., of Harvard University, Sunday afternoons, Music Hall.

- Nov. 17—"The Making of Carlyle."
- Nov. 24—"The Making of Emerson."
- Dec. 1—"Carlyle's Message to his Age."
- Dec. 8—"Emerson's Message to his Age."
- Dec. 15—"Carlyle for Today."
- Dec. 22—"Emerson for Today."

VII. Six Lectures on "The Spirit of American Poetry," by Prof. HENRY VAN DYKE, D.D., LL.D., of Princeton University, Monday evenings, beginning November 25, Music Hall.

VIII. Three Lectures on "Leaders of Modern England," by JOHN COWPER POWYS, M.A., of Cambridge University, England, Saturday evenings, Music Hall.

- Dec. 21—"Matthew Arnold and Walter Pater."
- Dec. 28—"John Morley and Joseph Chamberlain."
- Jan. 4—"G. K. Chesterton and Bernard Shaw."

IX. Two Dramatic Readings by Miss EDITH KUNZ, of New York, Monday afternoons.

- Dec. 23—"Peter Pan."
- Dec. 30—"Sir Arthur and his Knights."

X. Five Lectures on "George Meredith," by Prof. RICHARD BURTON, Ph.D., of the University of Minnesota, Thursday evenings.

- Jan. 2—"The Man Behind the Book."
- Jan. 9—"Early Romance: Richard Feverel."
- Jan. 16—"The Satires: Evan Harrington, Harry Richmond."
- Jan. 23—"The Psychologist: The Egoist."
- Jan. 30—"The Interpreter of Modern Life."

XI. Three Lectures on "Masters of Destiny," by LOUIS U. WILKINSON, M.A., of Cambridge University, England, Tuesday afternoons.

Jan. 28—"Alexander the Great."

Feb. 4—"Julius Caesar."

Feb. 11—"Charlemagne."

XII. Six Lectures on "Ideals in Life," by C. DELISLE BURNS, M.A., of Cambridge University, England, Wednesday afternoons.

Jan. 8—"Plato's 'Republic.' "

Jan. 15—"a Kempis' 'Imitation of Christ.' "

Jan. 22—"More's 'Utopia.' "

Jan. 29—"Morris' 'News from Nowhere.' "

Feb. 5—"Wells' 'Modern Utopia.' "

Feb. 12—"The Conception of a 'Golden Age.' "

XIII. Three Dramatic Interpretations and Impersonations of Modern Drama, by Miss LOUISE WALLACE HACKNEY, of Chicago. For the subjects of these Readings see Department of Dramatic Art.

XIV. Eight Lectures on "Shakespeare and his Plays," by Prof. EDWARD HOWARD GRIGGS, M.A., L.H.D., President of the Department of Philosophy.

Feb. 18—"The Humanity of Shakespeare."

Feb. 25—"The Ethical Awakening: The Merchant of Venice."

Mar. 4—"The Individual and the State: Julius Caesar."

Mar. 11—"World Forces and the Individual: Antony and Cleopatra."

Mar. 18—"Facing the Mystery: Hamlet."

Mar. 25—"The Tragedy of Fate: Othello."

Apr. 1—"The Tragedy of Guilt: Macbeth."

Apr. 8—"The Final Attitude: The Tempest."

XV. Six Lectures on "Social and Literary London," by LEON H. VINCENT, M.A., of Boston, Wednesday evenings.

- Feb. 19—"Samuel Rogers and his Literary Breakfasts."
- Feb. 26—"Lord Byron's London Career."
- Mar. 5—"Tom Moore, the Society Minstrel."
- Mar. 12—"Lady Blessington and Gore House."
- Mar. 19—"Sidney Smith as a Man of the World."
- Mar. 26—"Disraeli as a Dandy and a Novelist."

XVI. Four Lectures on "English Epic Poetry," by WILLIS BOUGHTON, Ph.D., of Erasmus Hall High School, Monday evenings.

- Apr. 7—"Beowulf, the First Great English Epic: Chaucer and Stories from the Canterbury Tales."
- Apr. 14—"Spenser: The Faery Queene."
- Apr. 21—"Milton: Paradise Lost and Paradise Regained."
- Apr. 28—"Tennyson: The Idylls of the King."

XVII. Seven single Lectures and Dramatic Readings.

Oct. 8—(Tuesday evening)—Address by HENRY GAINES HAWN, President of the Hawn School of Speech Arts. Subject: "Oral English in Education."

Nov. 10—(Sunday afternoon)—First Public Presentation in Greater New York of the Life of John Bunyan and of Bunyan's "Pilgrim's Progress" in Motion Pictures. Special Music by G. WARING STEBBINS. Organist of Emmanuel Baptist Church.

Dec. 6—(Friday afternoon)—Lecture by Prof. J. G. CARTER TROOP, M.A. Subject: "Milton."

Dec. 17—(Tuesday afternoon)—Dramatic Reading by Mrs. JEAN B. SLOCUM, of Brooklyn. Subject: "Miscellaneous Programme: Selections in the Christmas Spirit." Mrs. LORA P. MOORE, Accompanist.

Dec. 27—(Friday evening)—Dramatic Reading by

Miss GLENN RAYMOND, of Brooklyn. Subject: "Galatea," by W. S. Gilbert.

Dec. 31—(Tuesday afternoon)—Lecture by Prof. FRANK W. CHANDLER, of the University of Cincinnati. Subject: "George Bernard Shaw: a Satirical Dramatist."

Dec. 31—(Tuesday evening)—Dramatic Reading by Mrs. ELIZABETH POOLER RICE, of Boston. Subject: "Miss Hobbs," by Jerome K. Jerome.

XVIII. A Series of Eight Addresses, Lectures and Readings given at the various Branches of the Institute.

Miss RETTA STECK. See Huntington Branch.

Mrs. BERTHA KUNZ BAKER. See Huntington and Jamaica Branches.

LEON H. VINCENT. See Huntington, Jamaica and Garden City Branches.

JAY DWIGGINS. See Jamaica Branch.

Mrs. ELIZABETH POOLER RICE. See Jamaica Branch.

XIX. A Special Course of Five Interpretative Readings of the Great Dramas of Today by Mrs. BERTHA KUNZ BAKER, in the Music Hall, Saturday evenings.

Nov. 16—"Chantecler," Rostand.

Nov. 23—"Spring Awakening," Wedekind.

Nov. 30—"Pelleas and Melisande," Maeterlinck.

Dec. 7—"To-morrow," MacKaye.

Dec. 14—"A Good Little Devil," Gerard and Rostand.

XX. Three Special Presentations in Motion Pictures of the LIFE OF JOHN BUNYAN AND OF BUNYAN'S "PILGRIM'S PROGRESS." Special Music on the Organ, by G. WARING STEBBINS, Organist of the Emmanuel Baptist Church, Music Hall, Thursday evening, December 19 and Wednesday afternoon and evening, January 1.

XXI. Four Special Evening Dramatic Dickens Recitals by FRANK SPEAIGHT, of London, Music Hall.

Feb. 7—(Friday)—“A Tale of Two Cities.”

Feb. 15—(Saturday)—“Nicholas Nickleby.”

Feb. 22—(Saturday)—“Pickwick Papers.”

Mar. 1—(Saturday)—“David Copperfield.”

XXII. Two Special joint Addresses by Miss HELEN KELLER and her Teacher, Mrs. JOHN MACY (Miss ANNE M. SULLIVAN). Subject: “The Heart and the Hand, or the Right Use of our Senses.” Music Hall, Thursday evening, March 6 and Thursday evening, March 19.

XXIII. Apr. 4—(Friday evening)—A Series of Original Monologues by Miss BEATRICE HERFORD, in the Music Hall. Programme: “The Book Agent,” “The Complainier,” “The Frivolous Side,” “The Cook,” “Choosing the Wall Paper.”

XXIV. A Course in English Literature conducted by WILLIS BOUGHTON, Ph.D., of Erasmus Hall High School. Thirty sessions of one hour each, Monday afternoons, beginning October 7.

XXV. A Course in The Romantic Movement in English Literature conducted by WILLIS BOUGHTON, Ph.D. Thirty sessions of one hour each, Saturday mornings beginning October 12.

XXVI. A Course in American Literature conducted by Miss HELEN DAWES BROWN. Thirty sessions of one hour each, Friday afternoons beginning October 4.

XXVII. Courses in Oral English, conducted by HENRY GAINES HAWN, Tuesdays, beginning October 8. Beginners' Classes, 4.15 and 8.15; Advanced class, 3 P. M.

## (b) GERMAN LANGUAGE AND LITERATURE

Prof. JOHN F. COAR, Ph.D.	<i>President</i>
Rev. JACOB W. LOCH, Ph.D.	<i>First Vice-President</i>
.Mrs. OTTO GOEPEL	<i>Second Vice-President</i>
Rev. JOHN J. HEISCHMANN, D.D.	<i>Third Vice-President</i>
ROBERT B. MARVIN	<i>Secretary</i>

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(Consisting of the Officers, Chairmen of the three Standing Committees, and two elected members)

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Rev. JOHN J. HEISCHMANN, D.D.	ROBERT B. MARVIN

*Committee on Lectures*

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HON. FREDERICK W. HINRICHES	Prof. HENRY E. NORTHRUP, Ph.D.
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DANIEL A. HUEBSCH, Ph.D.	

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F. W. WUNDERLICH, M.D., <i>Chairman</i>	
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Mrs. GUSTAV HEUBACH	GUSTAV HEUBACH

*Committee on Music*

OTTO GOEPEL, *Chairman*

ALEXANDER RIHM	PAUL LICHTENSTEIN
OSWALD JOERG, M.D.	Miss ADA PALMEDO

The Constitution of the Section states that the purposes of the Section are to provide facilities for the study and the enjoyment of the German Language and Literature through courses of instruction, series of lectures and addresses, the presentation of German plays, folk songs and operas, and in such other ways as may be found practicable from time to time.

Under the auspices of the German Section of the Department of Philology the following events were conducted:

## XXVIII. Four Single Readings and Addresses.

Dec. 4—(Wednesday evening)—Reading by Dr. R. W. DRECHSLER, Director Amerika Institut, Berlin, Germany. Subject: "Rezitationsabend-Balladen u. s. w."

Dec. 16—(Monday evening)—Centennial Address under the auspices of the Germanistic Society of America and the INSTITUTE in Commemoration of the 150th Anniversary of the Birth of Johann Gottlieb Fichte, by HERR EUGEN KÜHNEMANN. Subject: "Fichte: Philosopher and Patriot."

Mar. 18—(Tuesday evening)—Lecture by Prof. RUDOLPH EUCKEN, Ph.D., of the University of Jena. Subject: "The Necessity of Idealism."

Mar. 24—(Monday evening)—Lecture under the auspices of the Germanistic Society of America and the INSTITUTE, by Prof. CARL BEZOLD, of the University of Heidelberg. Subject: "Babylonisch-Assyrische Religion."

XXIX. Eight Lecture Recitals on "The Music Dramas of Richard Wagner," by THOMAS A. HUMASON, Ph.D., of Brooklyn. Music Hall, Monday evenings, beginning March 10. For subjects of these recitals see Department of Music.

XXX. Reading Circles of ten Lessons each were held on Wednesday afternoons at 174 Montague Street. The Circles were conducted by Miss ADA PALMEDO, of the Packer Collegiate Institute.

(c) THE GREEK AND LATIN LANGUAGES AND LITERATURES

Prof. EDWARD S. HAWES, Ph.D., *Chairman*

XXXI. Six Lectures on "Greece," by Miss FLORENCE A. STONE, M.A., of Athens, Greece, Thursday afternoons,

beginning January 2. For subjects of these Lectures see Department of Geography.

XXXII. The Classical Museum. The first section of the Museum Building of the Institute contains four galleries designed specially to contain collections representing the History of Greek and Roman Art. The first of these galleries is the GREAT HALL OF GREEK SCULPTURE, 110 x 38 feet and 27 feet high, constructed for the exhibition of replicas of the most important works in Greek Sculpture and Archaeology. The second and third galleries are planned to receive replicas of Architectural subjects, including metopes, friezes, columns, capitals, pedestals and bas-reliefs in general. The fourth gallery is designed to receive reproductions of Roman Sculpture.

To the Collections of Greek and Roman Sculpture and Architecture have been contributed by Members and friends of the Institute replicas of very important sculptures. Lists of the names of the works presented, together with the names of the donors, may be found in the Year Books of the Institute.

The Museum received from Col. ROBERT B. WOODWARD in 1901-02 a very valuable collection of Syrian glass, numbering some six hundred pieces. To this collection additions have been frequently made by Colonel Woodward.

The Museum received from the British Museum in August, 1900, a set of electrotype reproductions of the British Museum Collection of Greek Coins. These were placed on exhibition in 1901.

The collections illustrating the Greek and Roman Civilizations are placed temporarily in the central and eastern galleries on the first floor and in one of the smaller galleries on the third floor pending the erection of further additions to the Museum.

## ORIENTAL LANGUAGE AND LITERATURE

XXXIII. Six Lectures on "Post Biblical Hebrew Literature," by RABBI NATHAN KRASS, Litt.D., of Temple Israel, Brooklyn, Thursday evenings.

Nov. 14—"Hidden Things."

Nov. 21—"The Blank Page Between the Old and the New Testaments."

Nov. 28—"The Blank Page Between the Old and the New Testaments (continued)."

Dec. 5—"A Bizarre Literature."

Dec. 12—"That Book of Gold."

Dec. 19—"A Quaint Homiletic Collection."

XXXIV. Six Lectures on "The Political, Social and Educational Situation in India," by RUSTOM RUSTOMJEE, of Bombay, India, Friday evenings. For subjects of these Lectures see Department of Political Science.

XXXV. Six Lectures on "China and Japan," by Prof. TOYOKICHI IYENAGA, Ph.D., of Tokyo, Thursday afternoons. For subjects of these Lectures see Department of Geography.

XXXVI. Six Lectures on "Great Moral Leaders of the Orient," by ALFRED W. MARTIN, M.A., S.T.B., of the Ethical Culture School, New York, Thursday evenings.

Oct. 3—"Gotama: The Apostle of Self-Discipline."

Oct. 10—"Zoroaster: The Prophet of Industry."

Oct. 17—"Confucius: The Statesman and Moralist."

Oct. 24—"Moses: The Liberator and Legislator."

Oct. 31—"Jeremiah: The Patriot and Prophet."

Nov. 7—"Mohammed: The Reformer."

XXXVII. Three Lectures on "The Political and Social Conditions in China," by Dr. YAMEI KIN, of China, Tuesday afternoons. For subjects see Department of Political Science.

## (e) THE FRENCH LANGUAGE AND LITERATURE

Prof. CHARLES GUÉRIN, Officer d'Académie, *Chairman*Miss JULIE ERNESTINE CAPPELLE, *Secretary*

XXXVIII. A Series of ten Lectures given in the French Language under the joint auspices of the FRENCH SECTION and L'ALLIANCE FRANÇAISE. Polytechnic Institute, Monday evenings.

Oct. 14—Prof. LOUIS DELAMARRE, Ph.D., of the College of the City of New York. Subject: "Eugène Brieux."

Nov. 11—Prof. P. JORDAN, of Columbia University. Subject: "La Caricature en France." (Avec projections.)

Nov. 25—Prof. LOUIS DELAMARRE, Ph.D. Subject: "G. de Porto-Riche."

Jan. 27—Mlle. M. L. FONTAINE, Normal College of the City of New York. Subject: "Naples et ses Environs." (Avec projections.)

Feb. 10—Prof. L. A. LOISEAUX, of Columbia University. Subject: "Promenades en Suisse." (Avec projections.)

Feb. 24—Prof. RAPHAEL D'AMOUR, M.A., of Berkeley Institute. Subject: "Marie Antoinette." (Avec projections.)

Mar. 17—Prof. R. L. CRU, of the Normal College of the City of New York. Subject: "L'Aviation." (Avec projections.)

Apr. 7—M. RENÉ GALLAND, of Columbia University. Subject: "Avignon la cité des Papes." (Avec projections.)

Apr. 21—Prof. ROUX, of the University of Newark. Subject: "Le Canada Français." (Avec projections.)

May 5—Prof. P. D. DE MONTHULÉ, of Cathedral College. Subject: "Joseph Bonaparte en Amérique."

XXXIX. Three Special Courses of Instruction, conducted by Prof. RAPHAEL D'AMOUR, of Berkeley Institute. For particulars see School of Pedagogy.

XL. The Library of the Department of Philology, containing between seven and eight thousand volumes, is in the Museum Building, and portions of it are available for reference.

### DEPARTMENT OF PHILOSOPHY

#### *Officers for 1913-1914*

Prof. EDWARD HOWARD GRIGGS, M.A., L.H.D. *President*

Prof. FREDERICK W. OSBORN, M.A. *Vice-President*

Miss MARGARET S. WINSLOW *Secretary*

#### *Executive Committee*

Prof. EDWARD H. GRIGGS, L.H.D.	Rev. JOHN HOWARD MELISH
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Rev. ALBERT J. LYMAN, D.D.	Miss CHRISTINE ROUNDS
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Prof. FRED'K W. OSBORN, M.A.	Miss SARAH E. SCOTT, B.A.
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WENDELL T. BUSH, M.A.	Miss A. E. WYCKOFF, B.A.
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Prof. ERNEST N. HENDERSON	Rev. CALEB S. S. DUTTON
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Rev. L. MASON CLARKE, D.D.	ALFRED H. BROWN, M.A.
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Rev. JOHN L. BELFORD, S.T.D.	Rev. CHARLES CARROLL ALBERTSON, D.D.
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The Department of Philosophy was organized May 23, 1900, with a membership of two hundred and eighteen. It now numbers two hundred and ninety-nine.

The work of the Department has been as follows:

I. Eight Lectures on "The Philosophy of Education," by Prof. EDWARD HOWARD GRIGGS, M.A., L.H.D., President of the Department of Philosophy, in the Music Hall of the Brooklyn Academy of Music on Monday evenings.

Sept. 30—"The Character of the Child World."

Oct. 7—"The Aim of Education."

Oct. 14—"The Educational Influence of Nature and Society."

Oct. 21—"Work and Play in Education."

Oct. 28—"Principles of Government in Home and School."

Nov. 4—"The Influence of Personality in Education."

Nov. 11—"The Educational Value of History and Literature."

Nov. 18—"Education for the Art of Life."

II. Six Lectures on "The Ethics of the Modern Drama," by Mr. ALFRED H. BROWN, M.A., of Brooklyn, on Wednesday evenings:

Nov. 13—"The Terrible Meek." Kennedy.

Nov. 20—"The War God." Zangwill.

Nov. 27—"The Light that Shines in Darkness." Tolstoy.

Dec. 4—"Bought and Paid for." Broadhurst.

Dec. 11—"The Three Daughters of Mons. Dupont." Brieux.

Dec. 18—"To-morrow." MacKaye.

III. Six Lectures on "Great Moral Teachers of the East," by Mr. ALFRED W. MARTIN, M.A., S.T.B., of the Ethical Culture School, New York, on Thursday evenings:

Oct. 3—"Gotama: The Apostle of Self-Discipline."

Oct. 10—"Zoroaster: The Prophet of Industry."

Oct. 17—"Confucius: The Statesman and Moralist."

Oct. 24—"Moses: The Liberator and Legislator."

Oct. 31—"Jeremiah: The Patriot and Prophet."

Nov. 7—"Mohammed: The Reformer."

IV. Five Lectures on "The Development of the Moral Nature," by Prof. EARL BARNES, Ph.D., of Philadelphia, on Friday afternoons:

Sept. 27—"Moral Beginnings and Babyhood; Inheritance and Reflexes."

Oct. 11—"Right and Wrong in Infancy; Obedience and Caprice."

Oct. 18—"The Code of Ethics in Childhood; Animal Impulses and Human Ideals."

Oct. 25—"The Transition Time in Beliefs; Through Storm and Trouble."

Nov. 1—"The Aspirations and Struggles of Youth; The Peace of Righteousness."

V. Six Lectures on "Two Distinguished Oxfordians," by the Rev. S. PARKES CADMAN, D.D., LL.D., Pastor of the Central Congregational Church, Member of the Board of Trustees of the Institute, on Sunday afternoons:

Feb. 2—"The Princes and the People of the Fourteenth Century."

Feb. 9—"University and Clerical Life."

Feb. 16—"John Wyclif, the last of the Schoolmen and the First of the Reformers."

Feb. 23—"The Transition between John Wyclif and John Wesley."

Mar. 2—"The Eighteenth Century Men and Morals."

Mar. 9—"The Evangelical Revival and its Results."

VI. Six Lectures on "Contemporary Philosophy," by Prof. WILLIAM TURNER, S.T.D., of the Catholic University of America, Washington, D. C., on Thursday evenings:

Feb. 13—"Atheism."

Feb. 20—"Agnosticism."

Feb. 27—"Pantheism."

Mar. 6—"Materialism."

Mar. 13—"Idealism."

Mar. 20—"Pragmatism."

VII. Eight Lectures on "Shakespeare and his Plays," by Prof. EDWARD HOWARD GRIGGS, A.M., L.H.D., Presi-

dent of the Department, on successive Tuesday evenings, beginning February 18th. For Subjects of these Lectures see Department of Philology.

## DEPARTMENT OF PHOTOGRAPHY

### *Officers for 1913-1914*

WILLIAM E. MACNAUGHTAN	<i>President</i>
CHARLES B. DENNY	<i>Vice-President</i>
RICHARD M. COIT	<i>Secretary</i>
HARRY GEORGE BOHN	<i>Treasurer</i>

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H. L. UNDERHILL	HARRY GEORGE BOHN
WILLIAM T. KNOX	MYERS R. JONES
	JAMES W. KENT

### *Committee on Exhibitions*

#### WILLIAM E. MACNAUGHTAN, *Chairman*

ROBERT B. MONTGOMERY	PERCY G. FARQUHARSON
SAMUEL HOLDEN	JAMES E. UNDERHILL

The Department of Photography was organized March 26, 1889, with thirty-four members. The present membership is five hundred and eight.

The work of the Department has been as follows:

#### I. Four Single Illustrated Lectures and Exhibitions.

Sept. 30—(Monday evening)—Lecture by HENRY G. PEABODY, of San Francisco. Subject: "The Grand Canyon of the Colorado."

Nov. 10—(Sunday afternoon)—First Public Presentation of Motion Pictures illustrating The Life of John Bunyan and Bunyan's "Pilgrim's Progress," with Special music

on the Great Organ, by G. WARING STEBBINS, Music Hall, Academy of Music.

Dec. 26—(Thursday evening)—Lecture by STEPHEN ROGERS, of Lynn, Mass. Subject: "Afoot in the White Mountains."

Jan. 27—(Monday evening)—Lecture by S. N. LEEK, of Jackson, Wyoming. Subject: "Saving the Elk of the Northwest," illustrated by Motion Pictures.

## II. Thirty-one Demonstrations and Exhibitions in the Studio Rooms, Academy of Music.

Oct. 18—Demonstration by W. H. ZERBE. Subject: "Methods of securing Soft Prints from Extremely Hard Negatives."

Oct. 21—Loan Exhibition by ALVIN LANGDON COBURN.

Nov. 4 and 11—Loan Exhibition by members of the Summer Photographic Class of Columbia University, under the direction of CLARENCE H. WHITE.

Nov. 8—Demonstration by W. H. ZERBE. Subject: "Combination Printing, using two or more Negatives for Working in Figures, Clouds, Foreground, etc."

Nov. 18 and 25—Exhibition by Miss GERTRUDE E. KASEBIER, of New York.

Dec. 2—Loan Exhibition by AUGUSTUS THIBAUDEAU, of Niagara Falls.

Dec. 9—Loan Exhibition by ELIAS GOLDENSKY of Philadelphia.

Dec. 13—Exhibition of Lantern Slides by THE BROOKLYN ACADEMY OF PHOTOGRAPHY.

Dec. 16 and 23—Loan Exhibition by CHARLES B. DENNY.

Dec. 20—Informal Address and Demonstration by CHARLES B. DENNY, on "Still Life Photography."

Dec. 30 and Jan. 6—Loan Exhibition by KARL STRUSS.

Jan. 3—Demonstration by W. H. ZERBE. Subject: "After Treatment of Negatives."

Jan. 13 and 20—Loan Exhibition by RICHARD M. COIT, JOSEPH R. COOPER and W. E. MACNAUGHTAN.

Jan. 17—Demonstration by RICHARD M. COIT and W. E. MACNAUGHTAN. Subject: "Hand coated Platinum on Various Papers."

Jan. 27 and Feb. 3—Loan Exhibition by CLARENCE E. WHITE.

Jan. 31—Exhibition of Lantern Slides by SAMUEL HOLDEN.

Feb. 10—Loan Exhibition by EDWARD R. DICKSON.

Feb. 17 and 24—Loan Exhibition by Mrs. BOSTWICK and Miss WHITTEMORE.

Feb. 28—Demonstration by W. H. ZERBE. Subject: "Home Portraiture by Flash Light."

Mar. 3 and 10—Loan Exhibition by PAUL LEWIS ANDERSON.

Mar. 14—Demonstration by W. H. ZERBE. Subject: "Carbon Process."

Mar. 31—Loan Exhibition by W. H. ZERBE.

Apr. 11—Illustrated Lecture by Col. E. A. HAVERS Subject: "The Marvels of Modern Photography."

III. A Course of Instruction in Artistic Photography by CLARENCE H. WHITE, of Columbia University, in the Studio, first and third Thursday evenings of each Month, beginning October 3.

IV. Special Course of Instruction in "The Rudiments of Photography," conducted by WILLIAM H. ZERBE, in the Studio, on Tuesday evenings, beginning October 8.

V. The Twenty-third Annual Exhibition was given by the Department in the Art Building, 174 Montague Street, from Saturday, April 19, to Wednesday, April 30, inclusive. The Exhibition was open on week days from 3 to 6.30, and 7.30 to 10 P. M. Sundays from 2 to 6 P. M.

The following members exhibited:

**J. MILTON BERGEN**

1. Portrait Study	3. Portrait Study
2. Portrait Study	4. Portrait Study

**HARRY GEORGE BOHN**

5. Temple of Aesculapius: Rome
6. Baptistry of San Marco: Venice
7. Fragment from Hadrian's Villa: Tivoli
8. Arch of Constantine: Rome
9. Santa Maria Della Salute: Venice
10. Reflections: St. Johns, Canada

**VICTOR N. CAMP**

11. A South Bay Net	13. Late Snow
12. Cavalry with Mountain Battery	14. 'Long the Links
	15. Old Apple Tree

**RICHARD M. COIT**

16. Portrait
17. Portrait
18. St. Andrew's Church Yard: Staten Island
19. Gate: Cathedral of St. John the Divine
20. Mt. Desert, Maine
21. Madonna and Child: Michael Angelo

**HERBERT WHEATON CONGDON**

22. Decorative Study: An Evening in May	25. Landscape: Basin Harbor, Vt.
23. Still Life	26. Portrait: Henry Page, Jr.
24. Still Life	

**JOSEPH R. COOPER**

27. Girl in White	29. Portrait
28. White Roses	30. The Letter

**E. STOCKTON CRAWFORD**

31. Woodland Path	34. A Bend in the River
32. At the End of the Lake	35. Early Spring
33. Evening at the Bars	36. The Old Mill

## CHARLES J. DAMPF

37. Evening: Portrait	40. Portrait
Study	
38. Portrait	41. Portrait
39. Portrait	42. Portrait

## CHARLES B. DENNY

43. Portrait	46. "Jimmy"
44. Portrait	47. "David"
45. Portrait: Mr. Clarence H. White	48. The Challenge
	49. The Door to the Garden

## GODFREY T. FIRTH

50. Clovelly	52. A Quiet Hour
51. A Difficult Beaching	53. In the Glen

## ARTHUR H. FLINT

54. "Baby"	56. Study
55. The Demonstration	57. Feathers

## FLORENCE BAKER GREY

58. At the Edge of the	60. October
Orchard	61. The Last Gleam
59. Leila	62. A Study in Sunlight

## EMILY C. M. HOLCKE

63. Spring
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## MYERS R. JONES

64. A Portrait	67. Four Score and Four
65. Enjoying a Smoke	68. A Bit of Normandy
66. Study of a Head	69. Girl at the Window

## MRS. CHARLES J. JOYCE

70. Delaware River	73. Leeds Bridge
71. The Orchard Fence	74. Catskill Creek
72. The Old Mill	75. The Rope Ferry

## JAMES W. KENT

76. Alfred	79. In the Berkshires
77. In Rockland County	80. Off for a Walk
78. The Cabinet Maker	

## WARRINGTON G. LEWIS

81. Portrait

82. Portrait

## WM. ELBERT MACNAUGHTAN

83. An Old Stone Bridge 86. In the Connecticut Valley  
 84. Low Tide: Ogunquit 87. Along the River: Walpole  
 85. A Hillside Pasture

## KATHARINE H. MEIGS

88. Old Town

90. The Brook

89. Spring

91. Ducklings

## ROBERT B. MONTGOMERY

92. A Bit of Old Lyme 94. A Vermont Landscape  
 93. The Elms: Old Lyme 95. The Birch Trees: Wal-  
     pole

## KATHRYN OLLER

96. Girl Drawing  
 97. "Lambkin"  
 98. A Study  
 99. The Brass Bowl

100. Romance  
 101. A Breath of the Pine  
     Woods.

## EDWARD OSTROM, JR.

102. Woods at Scarsdale 105. The Road to the Light-  
 103. Night Picture house  
 104. Portrait of a Friend 106. Canal at Great Notch

## IDA M. THIELE

107. Platte Clove, N. Y. 109. Seventy-five Years  
 108. Daisies Young.

## HENRY L. UNDERHILL

110. Coenties Slip  
 111. Along South Street

112. The Singer Tower

## ELBA E. WATSON

Americans of Tomorrow:  
 113. German  
 114. English

115. Irish  
 116. Swede  
 117. Hebrew

## ARTHUR L. YODER

118. Grant's Tomb

119. "Now I Lay Me"

## Jos. L. Hitz

120. Arizona  
121. Evening

122. Catalina  
123. Avalon

The number of exhibitors was twenty-seven and the number of exhibits, one hundred and twenty-three. The Board of Judges consisted of F. WEITENKAMPF, Miss GERTRUDE KASEBIER, and THOMAS BIRCH KING. W. E. MACNAUGHTAN was awarded First Prize for his Landscape Group numbers 83 to 87 inclusive. HENRY L. UNDERHILL was awarded Second Prize for his group numbers 110 to 112 inclusive. First honorable mention was won by CHARLES B. DENNY for No. 49, the second went to HERBERT WHEATON CONGDON, for No. 24. Third honorable mention was awarded to Miss KATHRYN SEVILLE OLLER for No. 101. ROBERT B. MONTGOMERY received fourth honorable mention for his Exhibit No. 93.

VI. Courses of Special Illustrated Lectures under the joint auspices of the Departments of Geography and Photography. For full particulars see Department of Geography.

VII. A COLLECTION OF PHOTOGRAPHS OF LONG ISLAND. The Department is now, and has been for some years past, engaged in making a collection of lantern-slide photographs of Brooklyn, its vicinity, and Long Island, from Fort Hamilton to Montauk Point. This collection, deposited at the Museum Building, now numbers upwards of four hundred and fifty. Contributions to this collection are invited and will be welcomed from all who are interested in the scenery, history, architecture, geology or inhabitants of this Borough or of Long Island. The Chairman of the Committee in charge of this Collection for the coming year is ROBERT B. MONTGOMERY, 154 Lafayette Avenue, Brooklyn.

VIII. The Department of Photography is to be congratulated upon the excellent facilities for work that have been provided for it, and for the valuable provisions that have been made for the instruction and enjoyment of all its members. The suite includes a large studio room, 24 x 30 feet, which is provided with a good skylight, 26 x 10 feet, and is excellently adapted for studio photography; a dark room, provided with all the accessories necessary for the development of photographs, and an enlarging room, with good north light. The rooms contain appliances adapted to the best work in photography.

Members of the Department who desire to make practical use of the new rooms or of any of the apparatus belonging to the Department, can do so by the payment of the small fee of five dollars per year. Applications for the use of the rooms and apparatus should be made by mail to the Chairman of the House Committee, Department of Photography, Academy of Music.

The meetings at the Department Rooms are open to all of the Members of the Department. The reading-room contains the best current periodicals on photography.

The rooms can be reached by elevators and are equipped with the best appliances for photographic work by Members of this Department.

## DEPARTMENT OF PHYSICS

### *Officers for 1913-1914*

Prof. E. R. von NARDROFF, D.Sc.	<i>President</i>
Prof. JOHN S. MCKAY, Ph.D.	<i>Vice-President</i>
Dr. OLIN M. JACOBS	<i>Secretary</i>

### *Executive Committee*

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Prof. E. R. von NARDROFF, D.Sc.	J. P. WINTRINGHAM
Prof. WM. C. PECKHAM, M.A.	WALLACE GOOLD LEVISON, B.Sc.
Prof. SAMUEL SHELDON, Ph.D.	Prof. ALBERT W. AVERY
Dr. OLIN M. JACOBS	WILLIAM CLINTON BURLING
FREDERICK W. HUNTINGTON, M.E.	JOSEPH M. JAMESON

The Department was organized in May, 1888, with thirty-six members. The present membership is one hundred and twenty-seven.

The work of the Department has been as follows:

I. A Course of Three Lectures under the joint auspices of the BROOKLYN INSTITUTE and the POLYTECHNIC INSTITUTE, on "The Rare Elements of the Air," by Sir WILLIAM RAMSAY, F.R.S., LL.D., D.C.L., of London, Tuesday evenings, beginning October 22. For subjects see Department of Chemistry.

II. Other Lectures on Physical Science are announced under the Departments of Electricity, Engineering and Chemistry, as being of especial interest to the Members of those Departments.

#### DEPARTMENT OF POLITICAL SCIENCE

*Officers for 1913-1914*

J. HERBERT LOW, M.A.	<i>President</i>
Hon. CHARLES H. FULLER	<i>Vice-Presidents</i>
Pres. FRED W. ATKINSON, Ph.D.	
Prof. CHARLES R. FAY, M.A.	<i>Secretary</i>

*Executive Committee*

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Hon. HARRINGTON PUTNAM	CONRAD V. DYKEMAN
Pres. FRED W. ATKINSON, Ph.D.	FRANCIS H. LUDLOW, B.A.
BENJAMIN F. SEAVER	CHARLES M. CLAGHORN, M.A.
Mrs. S. SHEPPARD BRYAN	Hon. GEORGE FREIFELD
RAYMOND V. INGERSOLL	CHARLES COLEMAN MILLER
Hon. CHARLES H. FULLER	CHARLES R. FAY, Ph.D.
FREDERICK W. ROWE	Hon. RUSSELL BENEDICT
GEORGE E. BOYNTON	Hon. GEORGE W. BRUSH, M.D.
GUY DUVAL	HERBERT J. McCREARY

Rev. CALEB S. S. DUTTON

The Department of Political Science was organized on December 17, 1889, with one hundred and sixteen members. The present membership is eight hundred and sixteen.

The work of the Department is under the general direction of the Executive Committee.

The work of the Department has been as follows:

I. Six Lectures on "The Political, Social and Educational Situation in India," by RUSTOM RUSTOMJEE, of Bombay, India, Friday evenings.

Sept. 27—"India of To-day."

Oct. 4—"The Unrest in India."

Oct. 11—"Women of India."

Oct. 18—"Cities and Temples of India."

Oct. 25—"The Parsees of India."

Nov. 1—"The Problems of India."

II. Six Illustrated Lectures on "China and Japan," by TOYOKICHI IYENAGA, Ph.D., of Tokyo, Thursday afternoons, beginning November 14. For subjects of these Lectures see Department of Geography.

III. Six Lectures on "Emancipation," by MRS. ANNA GARLIN SPENCER, of New York, Monday afternoons.

Nov. 11—"Political Emancipation: From Rule of Race or Class to Sovereignty of Human Quality."

Nov. 18—"Educational Emancipation: From Tradition to Science; From Imitation to Initiative; From Passive to Active."

Nov. 25—"Industrial Emancipation: From Slavery to Free Labor; From Military Service to Money-tax; From Fixed Status to Dynamic Opportunity."

Dec. 2—"Emancipation of Women: From Sex-slavery to Human Rights; From Illiteracy to Higher Education; From Legal Minority to Contract Powers; From Political Nonentity to Full Citizenship."

Dec. 9—"Social Emancipation: From Custom to Law; From Fashion to Art; From Class to Humanity; From Show to Substance."

IV. Three Lectures on "Political and Social Conditions in China," by Dr. YAMEI KIN, of China, Tuesday afternoons.

Jan. 7—"Social Conditions in China."

Jan. 14—"Industrial Conditions in China."

Jan. 21—"Political Conditions in China."

V. Three Addresses on "Woman's Progress," by Mrs. PHILIP SNOWDEN, of London, England, Music Hall, Saturday evenings.

Jan. 18—"What Woman Will Do with the Ballot."

Jan. 25—"What Woman Will Contribute to Society."

Feb. 1—"What Woman Will Contribute to Religion."

VI. Six Addresses by the Rev. S. PARKES CADMAN, D.D., LL.D., Pastor of the Central Congregational Church, in the Music Hall, Sunday afternoons, beginning February 2. For subjects of these Lectures see Department of Philosophy.

VII. Three Lectures on "Masters of Destiny," by LOUIS U. WILKINSON, M.A., of Cambridge University, England, Tuesday afternoons.

Jan. 28—"Alexander the Great."

Feb. 4—"Julius Cæsar."

Feb. 11—"Charlemagne."

VIII. Six Lectures on "European States and Their Problems," by Prof. JEROME H. RAYMOND, M.A., Ph.D., of Chicago, Friday evenings.

Feb. 21—"Vienna and the War of Races in Austria-Hungary."

Feb. 28—"Berlin and the Struggle against Militarism in Germany."

Mar. 7—"St. Petersburg and the Conflict with Autocracy in Russia."



Mar. 14—"Finland: Progress in the Midst of Oppression."

Mar. 21—"Ireland: The Struggles of an Unsubdued Race."

Mar. 28—"Portugal: Europe's Youngest Republic."

IX. Three Lectures on "The Negro in the United States," by Mrs. MARY CHURCH TERRELL, Member of the Board of Education, Washington, D. C., Thursday afternoons.

Feb. 27—"The Emancipation Proclamation, and the Development of Christian Womanhood in the South."

Mar. 6—"The Strongest for the Weakest."

Mar. 13—"A Plea for the White South."

X. Six Lectures by Prof. JAMES J. FOX, S.T.D., of the Catholic University of America, Washington, D.C., Thursday evenings, beginning March 27. For subjects see Department of Sociology.

XI. Four Lectures on "American Industry," by Prof. J. HERBERT LOW, M.A., of Manual Training High School, Tuesday afternoons. These Lectures were given at Adelphi College.

Apr. 22—"Industry and the Labor Question before the Civil War."

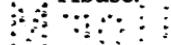
Apr. 29—"The Problems of Modern Industry."

May 6—"The Dark Side of Industry."

May 13—"Recent Attempts to Harmonize Capital and Labor."

XII. Three Addresses on "The Labor Situation," by Hon. JOHN MARTIN, Member of the Board of Education of the City of New York, Thursday evenings.

May 8—"Labor Organizations: Their Use and Abuse."



May 15—"Labor and Politics."  
 May 22—"The Ideals of Labor."

XIII. Six Single Lectures.

Oct. 5—(Saturday evening)—Hon. CALVIN TOMKINS, Commissioner of Docks of the City of New York. Subject: "The Present and Prospective Needs of the Dock Department."

Nov. 12—(Tuesday evening)—Hon. ELIJAH R. KENNEDY, of New York. Subject: "Secession in California and Oregon in 1861."

Feb. 10—(Monday evening)—Hon. CHARLES A. TOWNE, Ex-Senator of the United States from Minnesota. Subject: "Abraham Lincoln."

Feb. 8—(Saturday evening)—Miss BEATRICE FORBES-ROBERTSON. Subject: "Patriotism."

Feb. 14—(Friday evening)—Hon. LAWSON PURDY, President of the Board of Tax Commissioners of the City of New York. Subject: "The Principles Governing the Assessment of Taxes in the City of New York."

May 27—(Tuesday evening)—HERBERT L. BRIDGMAN, M.A., President of the Department of Geography. Subject: "The International Geographical Congress at Rome, and Personal Experiences in the Balkan States."

XIV. Twelve Lectures given at the various Branches of the Institute.

TOYOKICHI IYENAGA. See Huntington and Jamaica Branches.

FARNHAM BISHOP. See Huntington Branch.

JEROME H. RAYMOND. See Huntington, Jamaica and Garden City Branches.

Mrs. ANNA GARLIN SPENCER. See Jamaica Branch.

Dr. YAMEI KIN. See Jamaica and Garden City Branches.

XV. Special Address by Baroness von SUTTNER, of Vienna, Austria. Subject: "Women and the Politics of

the World." Opera House, Tuesday afternoon, December 10.

XVI. Special Illustrated Lecture on "The Balkan War and the Crushing of the Turk," by ANGUS HAMILTON, F.R.G.S., of London. Opera House, Thursday evening, February 27.

## DEPARTMENT OF PSYCHOLOGY

### *Officers for 1913-1914*

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Prin. FREDERIC L. LUQUEER, Ph.D.	<i>Vice-Presidents</i>
Prof. FREDERICK W. OSBORN, M.A. }	
WILLIAM J. TAYLOR, Ph.D.	<i>Secretary</i>

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Prof. FRED'K W. OSBORN, M.A.	Prin. CHARLES PERRINE, M.A.
Prin. GEORGE B. GERMANN, Ph.D.	ARTHUR C. PERRY, Jr., Ph.D.
Asso. Supt. CLARENCE E. MELENENY	JAMES SULLIVAN, Ph.D.
Prin. EMMA L. JOHNSTON, B.A.	Prin. LEWIS H. TUTHILL, Ph.D.
Miss A. E. WYCKOFF	Prin. LEON W. GOLDRICH, Ph.D.
Prin. FREDERIC L. LUQUEER, Ph.D.	CLEMENT L. VAUGHAN, Ph.D.
Prin. WM. J. MORRISON, M.A.	Prin. JOSEPH V. WITHERBEE
WILLIAM J. TAYLOR, Ph.D.	Prin. THOMAS O. BAKER, Ph.D.
H. C. CHILDS, M.A.	Prin. ROBERT J. FROST
Prof. ERNEST N. HENDERSON, M.A.	Prin. MARY A. MASON
Ph.D.	

The Department of Psychology was organized April 29, 1890, with sixty-eight members. The present membership is two hundred and eighty-five.

The work of the Department has been as follows:

I. Three Lectures on "The Education of Backward Children," by HENRY H. GODDARD, M.D., of Vineland, N. J., Monday afternoons.

Sept. 30—"Feeble-mindedness and Social Problems."

Oct. 7—"The Heredity of Feeble-mindedness."

Oct. 14—"What Can New York do with the Problem of the Mental Defectives."

II. Five Lectures on "The Development of the Moral Nature," by Prof. EARL BARNES, Ph.D., of Philadelphia, Friday afternoons.

Sept. 27—"Moral Beginnings and Babyhood: Inheritance and Reflexes."

Oct. 11—"Right and Wrong in Infancy: Obedience and Caprice."

Oct. 18—"The Code of Ethics in Childhood: Animal Impulses and Human Ideals."

Oct. 25—"The Transition Time in Beliefs: Through Storm and Trouble."

Nov. 1—"The Aspirations and Struggles of Youth: The Peace of Righteousness."

III. Course of Instruction in Educational Psychology, conducted by Prof. JAMES E. LOUGH, of the School of Pedagogy, New York University, thirty sessions of one hour each, Monday evenings, beginning October 7.

IV. Course of Instruction in the Philosophy of Education, conducted by Prof. HERMAN H. HORNE. For particulars see Department of Pedagogy.

#### THE DEPARTMENT OF SOCIOLOGY

##### *Officers for 1913-1914*

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Rev. J. HOWARD MELISH *First Vice-President*

CHARLES B. DAVENPORT, Ph.D., *Second Vice-President*

Miss SUSAN W. HOAGLAND *Secretary*

##### *Executive Committee*

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Miss SUSAN W. HOAGLAND

HERBERT F. SHERWOOD	Dr. CHARLES B. DAVENPORT
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Dr. CHARLES PERRINE

Rev. J. HOWARD MELISH	Dr. HENRY R. LINVILLE
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## STANDING COMMITTEES

*Lectures and Instruction*FRANKLIN H. GIDDINGS, Ph.D., *Chairman*ANNIE M. MACLEAN, Ph.D., *Vice-Chairman*Miss JULIA B. ANTHONY Prof. FRANKLIN H. GIDDINGS,  
WILLIS BOUGHTON, Ph.D. Ph.D.

Rev. CALEB S. S. DUTTON Miss JESSIE HUGHAN

Prof. CHARLES R. FAY SAMUEL McCUNE LINDSAY, Ph.D.

Prof. A. G. FRADENBURGH FLOYD J. MELVIN

## EUGENICS

Dr. HENRY R. LINVILLE, *Chairman*

Dr. CORA BALLARD Miss LOUISA BRUCKMAN

Miss ANTOINETTE GREENLY Dr. CHARLES B. DAVENPORT

Miss E. C. MACOMBER

## SUB-COMMITTEES ON EUGENICS

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ESTHER F. BYRNES, Ph.D. Miss ELEANOR SHAW

Miss FARRALL Miss JANE SHAW

Prof. E. V. GAINES ISABELLE T. SMART, Ph.D.

HENRY R. LINVILLE, Ph.D. Miss ALICE R. STEVENS

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*Immigration*HERBERT F. SHERWOOD, *Chairman*

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W. S. BIXBY Miss MARGARET ROSANUSKI

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Miss FENNESSEY Rev. LESLIE WILLIS SPRAGUE

WALTER LAIDLAW, Ph.D. Rev. EDWARD SANDERSON

HERBERT F. SHERWOOD

*Juvenile Crime*

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SIEGFRIED B. BLOCH, M.D.	H. CLAY PRESTON
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JOSEPH MERZBACH, M.D.	

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Miss MARY E. DREIER	HON. FRANK MANN
Mrs. GEORGE S. FRANK	TRAVERSE R. MAXFIELD, M.D.
WILLIAM E. HARMON	LOUIS H. PINK
Miss A. M. HOAGLAND	H. CLAY PRESTON
EDWARD T. HORWILL	ALFRED T. WHITE

*Education*

CHARLES PERRINE, *Chairman*

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Prin. THOMAS O. BAKER, Ph.D.	WILLIAM H. MAXWELL, LL.D.
WILLIS BOUGHTON, Ph.D.	Assoc. City Supt. CLARENCE E.
Prin. HOMER C. BRISTOL, M.A.	MELENENY
Rev. S. PARKES CADMAN, D.D.	JOHN MICKLEBOROUGH, Ph.D.
Miss M. I. CULBERT	Mrs. A. B. MORIARTY
Miss FANNIEBELLE CURTIS	Miss MARY MOORE ORR
GEORGE M. DAVISON	FREDERICK W. OSBORN
WILLIAM FAIRLEY, Ph.D.	CHARLES PERRINE
EDWIN FAIRLEY	Judge ISAAC F. RUSSELL
Rev. JAMES M. FARRAR, D.D.	Assoc. Supt. EDWARD B. SHALLOW
WILLIAM L. FELTER, Ph.D.	Miss MARGARET M. SHAW
GEORGE FREIFELD	Supt. SETH T. STEWART
EDWARD J. GOODWIN, Ph.D.	Miss GRACE C. STRACHAN
Miss GERTRUDE GRASSE	JAMES SULLIVAN, Ph.D.
WALTER B. GUNNISON, Ph.D.	HARRY R. TARBOX, M.D.
JAMES JENKINS, JR.	Miss HELEN VAN INGEN
Prin. EMMA L. JOHNSTON, M.A.	Rev. N. McGEE WATERS, D.D.
CHARLES D. LARKINS, Ph.D.	ELI W. WEAVER
CHARLES H. LEVERMORE, Ph.D.	LA SALLE H. WHITE, Ph.D.

*Social Conditions***RABBI NATHAN KRASS, Chairman**

CHARLES BERNHEIMER	Rev. JOHN B. GORMAN
Mrs. LILLIAN W. BETTS	Miss M. J. HOLMES
ALFRED J. BOULTON	Miss JENNIE JENNESS
Mrs. S. SHEPPARD BRYAN	Rabbi NATHAN KRASS
MILTON J. DAVIES	Miss ELLEN E. NICHOLS
Miss MARY E. DREIER	OswALD SCHLOCKOW
ADOLPH FELDBLUM	HERBERT F. SHERWOOD
Miss MARY J. C. FITZPATRICK	Rev. LESLIE WILLIS SPRAGUE
Prof. A. G. FRADENBURGH	JAMES SULLIVAN, Ph.D.

*Charity***Miss SUSAN W. HOAGLAND, Chairman**

SEYMOUR P. BARNARD	Miss ANTOINETTE NEELY
Mrs. T. BHUTIA	Miss GRACE O'BRIEN
MARTIN FLANNIGAN	Mrs. PARKS
T. L. FOGARTY	Mrs. JOHN F. RANKEN
Miss NANETTE M. HAMBURGER	Miss A. V. ROOME
Miss SUSAN W. HOAGLAND	SIMON ROTHSCHILD
NATHAN JONAS	PHILIP L. SEMAN
LOUIS KLEIN, M.D.	FRANK L. SNIFFEN
Miss MARY A. LAUDER	Mrs. T. TAYLOR
Miss JULIA W. LATIMER	Miss NATALIE VIDAUD
EBEN P. MORFORD	ARTHUR E. WAKEMAN

The Department of Sociology was organized on March 1, 1911, with seventy-two members. The present membership is one hundred and sixty-two.

The work of the Department has been as follows:

I. Six Lectures on "Socialism," by Prof. FRANKLIN H. GIDDINGS, Ph.D., LL.D., of Columbia University, Monday evenings.

- Sept. 25—"Socialism as a Fact."
- Oct. 2—"Socialism as a Theory."
- Oct. 9—"Socialism as an Indictment."
- Oct. 16—"Socialism as an Education."
- Oct. 23—"Socialism as a Program."
- Oct. 30—"Socialism as a Possibility."

II. Five Lectures by Prof. EARL BARNES, Ph.D., of Philadelphia, Friday afternoons. For subjects see Department of Psychology.

III. Three Lectures on "The Education of Backward Children," by HENRY H. GODDARD, M.D., of Vineland, N. J., Monday afternoons. For subjects see Department of Psychology.

IV. Three Lectures on "The Negro Race in the United States," by Mrs. MARY CHURCH TERRELL, Member of the Board of Education, Washington, D. C., Thursday afternoons, beginning February 27. For subjects of these lectures see Department of Political Science.

V. Six Lectures on "Sociology," by Prof JAMES J. FOX, S.T.D., of the Catholic University of America, Washington, D. C., Thursday evenings.

Mar. 27—"The Basis of Rights: Natural Justice."

Apr. 3—"The Individual and the State: Is the Individual or Society the Unit."

Apr. 10—"The Authority of the State over Private Property."

Apr. 17—"State Interference in the Interest of Social Reform."

Apr. 24—"Social Reform in the Church; Leo XIII; Ketteler; Manning."

May 1—"Socialism or Social Reform."

VI. Two Illustrated Lectures on "Eugenics," by Prof. CHARLES B. DAVENPORT, Ph.D., Director of the Eugenics Record Office, and Director of the Biological Laboratory, Cold Spring Harbor, L. I., Tuesday evenings.

Apr. 29—"Importance of Heredity in Social Affairs."

May 13—"America's Great Families and the Part they have Played in History."

VII. Three Addresses on "The Labor Situation," by Hon. JOHN MARTIN, Member of the Board of Education of the City of New York, Thursday evenings, beginning May 8. For subjects of these Addresses see Department of Political Science.

VIII. Five Single Meetings.

Nov. 2—(Saturday evening)—Conference conducted by HERBERT FRENCH SHERWOOD. Subject; "The Report of the International Eugenics Congress of June, 1912."

Nov. 6—(Wednesday evening)—Meeting in conjunction with the Brooklyn Neurological Society. Papers by Dr. WILLIAM BROWNING. Subject: "Medical Examination of Mentally Quasi Defective Children and Youth." HENRY H. GODDARD, M.D., Director of the Training School for Feeble Minded Children, Vineland, N. J. Subject: "Sociological Problems Presented by the Mentally Defective." ELIZABETH E. FARRELL, Inspector of Ungraded Classes, Department of Education. Subject: "The Place of the School in Problems of Mental Deficiency." Discussions by Dr. F. BLOCK, Dr. E. S. BARTLEY, Judge KEMPNER, Judge WILKIN, Dr. LUDLUM, Mr. PRESTON, Mr. HEBBARD and others. Library, Kings County Medical Society, 1313 Bedford Avenue.

Apr. 3—(Thursday afternoon)—Lecture by Prof. EMILY GREEN BALCH, B.A., of Wellesley College. Subject: "Immigration Policies."

Apr. 3—(Thursday evening)—Conference conducted by Prof. VITTORIO RACCA, University of Rome. Subject: "Eugenics and American Immigration."

May 13—(Tuesday afternoon)—Joint Meeting of the Brooklyn Institute of Arts and Sciences and the Child Welfare Committee of the New York City Federation of Women's Clubs, Mrs. OTTO KEMPNER, Chairman. Addresses by the Rev. ROBERT M. MOORE, D.D., "The Home-

less Child." Justice ROBERT J. WILKIN, "The Child at Court." Piano Selection by Mr. IRWIN E. HASSELL. Vocal Selection by Master JOSEF PAZLOFF. Mrs. B. H. STEINMETZ, Chairman of the House Committee. Mrs. RICH G. HOLLAMAN, Chairman of the Court Committee.

IX. Special Course in Sociology, conducted by Prof. RUDOLPH M. BINDER, Ph.D., of New York University. Thirty Sessions of one hour each. Wednesday evenings, beginning October 9.

X. Course in Principles of Socialism, conducted by FLOYD J. MELVIN, Ph.D., of Commercial High School. Thirty Sessions of one hour each, Friday evenings, beginning October 11.

#### DEPARTMENT OF ZOOLOGY

##### *Officers for 1913-1914*

JOHN J. SCHOONHOVEN, M.A.	<i>President</i>
SILAS C. WHEAT	<i>Vice-President</i>
GEORGE P. ENGELHARDT	<i>Secretary</i>

##### *Executive Committee*

JOHN J. SCHOONHOVEN, M.A.	GEORGE P. ENGELHARDT
Prof. JOHN MICKLEBOROUGH, Ph.D.	ROBERT C. MURPHY
FRANKLIN W. HOOPER, M.A., LL.D.	Prof. HENRY E. CHAPIN, M.Sc.
WILLIAM C. BRAISLIN, M.D.	THOMAS I. MILLER
WILLIAM T. HORNADAY, Sc.D.	ROBERT W. PEAVEY
Prof. C. B. DAVENPORT, Ph.D.	ALBERT H. PRATT
FRANK H. AMES	C. H. TOWNSEND
WILLIAM THOMPSON DAVIS	SILAS C. WHEAT
CHARLES L. POLLARD, M.A.	

The Department of Zoölogy was organized on February 12, 1889, with twenty-two members. The present membership is one hundred and nine.

The work of the Department has been as follows:

#### I. Six Lectures and Conferences.

Sept. 28—(Saturday evening)—Illustrated Lecture by HENRY OLUDYS, of Washington, D. C. Subject: "The Songs of Birds."

Oct. 25—(Friday evening)—Lecture by Prof. RUSSELL H. CHITTENDEN, Ph.D., of Yale University. Subject: "Nutrition." This Lecture was given under the joint auspices of the New York Association of Biology Teachers and the Institute.

Jan. 1—(Wednesday evening)—Illustrated Lecture by ERNEST HAROLD BAYNES, of Meriden, N. H. Subject: "The Dog."

Jan. 27—(Monday evening)—Lecture by S. N. LEEK, of Jackson, Wyoming. Subject: "The Elk of the Northwest," illustrated by lantern photographs and motion pictures. Music Hall.

Feb. 25—(Tuesday evening)—Illustrated Lecture by ROY C. ANDREWS, of the American Museum of Natural History. Subject: "Through Unexplored Northern Korea."

## II. Five Lectures given at the various Branches of the Institute.

ERNEST THOMPSON SETON. See Huntington, Jamaica and Garden City Branches.

HENRY OLUDYS. See Huntington and Jamaica Branches.

## III. Four Conferences in the Science Room under the auspices of the Natural Science Committee, on Saturday evenings.

Oct. 12—FRANK OVERTON, M.D., of Patchogue and DWIGHT FRANKLIN, of the American Museum of Natural History. Subject: "Batrachians."

Nov. 9—SILAS C. WHEAT, Vice-President of the Department of Zoology. Subject: "Marine Life of Peconic Bay."

Feb. 15—Dr. E. W. VIETOR, Secretary of the Bird Lovers' Club. Subject: "The Birds of Prospect Park."

Apr. 5—Dr. E. W. VIETOR. Subject: "The Birds of Prospect Park."

#### IV. THE MUSEUM ZOOLOGICAL COLLECTIONS

The Museum collections in Zoology have been arranged in part in cases in the galleries on the second floor of the Museum Building. The cases have been apportioned respectively to the Mammals, Birds, Reptiles, Fishes, Mollusca, Insects, Crustacea, Worms, Echinoderms, Collenterates, Sponges, etc. The Children's Museum has very important Zoological Collections that are adapted to the purposes of that Museum.

V. Large Additions to the Zoological Collections have been received through the generosity of Members and friends of the Institute. These are enumerated in the Year Books of the Institute.

VI. THE JOHN LEWIS CHILDS' COLLECTION OF BIRDS, numbering some 1,675 specimens, was purchased in May, 1911, for \$3,000.

#### THE SCIENCE ROOM COMMITTEE, 1913-14

JOHN J. SCHOONHOVEN, M.A.	<i>Chairman</i>
SILAS C. WHEAT	<i>Secretary</i>
JAMES P. WINTRINGHAM	<i>Curator</i>
Miss A. LOUISE M. GILBERT	<i>Librarian</i>

CHARLES M. ALLEN	Miss EDITH B. BRAINERD
FREDERICK W. APGAR	ALBERT J. BROOKS
Prof. ALBERT L. AREY	Prof. HENRY E. CHAPIN, D.Sc.
GEORGE E. ASHBY	Prof. CHARLES B. DAVENPORT,
HERBERT L. BALDWIN	Ph.D.
WILLIAM J. BALDWIN, C.E.	WILLIAM T. DAVIS
Prof. CHARLES P. BERKEY, Ph.D.	JACOB DOLL
HERBERT L. BRIDGMAN, M.A.	GEORGE P. ENGELHARDT

CHARLES ERICSON	Dr. EDGAR W. OLIVE
Prof. IRVING W. FAY, Ph.D.	JAMES H. PARK
GEORGE FRANCK	Mrs. CLAYTON A. PETERS
Prof. AMADEUS GRABAU, S.M., S.D.	Prof. CLAYTON A. PETERS, M.Sc.
J. NEWTON GRAY	CHARLES L. POLLARD, M.A.
Prof. WILLIAM J. HANCOCK, B.Sc.	Prof. ALLEN ROGERS
FRANCIS T. HUGHES	CARL SCHAEFFER
DANIEL D. JACKSON, B.Sc.	A. B. SEE
CYRUS A. KING, Ph.D.	Prof. RALPH C. TAGGART, M.E.
WALLACE GOOLD LEVISON, B.Sc.	NORMAN TAYLOR
Miss AGNES VINTON LUTHER	G. L. VAN DUSEN
JOHN McCALLUM	Prof. E. R. VON NARDROFF, D.Sc.
Prof. JOHN MICKLEBOROUGH, Ph.D.	B. G. WAY
THOMAS I. MILLER	JAMES WALKER
ROBERT C. MURPHY	GEORGE C. WOOD
	Miss MABEL A. YOUNG

I. A series of Twenty-two Saturday Evening Conferences in the Science Room, illustrated by lantern photographs, projectoscope, specimens, drawings and charts.

Oct. 5—Prof. DANIEL S. MARTIN, M.A., Brooklyn. Subject: "The Geology and Mineralogy of New York City."

Oct. 12—FRANK OVERTON, M.D., of Patchogue; DWIGHT FRANKLIN, of the American Museum of Natural History. Subject: "Batrachians."

Oct. 19—Prof. GEORGE C. WHIPPLE, of Harvard University. Subject: "The Problem of Ventilation."

Oct. 26—ALBERT J. BROOKS, President of the Department of Astronomy. Subject: "The Motions of the Stars."

Nov. 2—Prof. HENRY E. CHAPIN, M.Sc., D.Sc., President of the Department of Botany. Subject: "The Earliest Seed-bearing Plants."

Nov. 9—SILAS C. WHEAT, Secretary of the Department of Zoology. Subject: "Marine Life of Peconic Bay."

Nov. 16—J. H. M. COOK, of New York. Subject: "The Honey Bee: His Winter Life."

Nov. 23—B. G. WAY, Secretary of the Department of Astronomy. Subject: "The Orbits of the Planets."

Nov. 30—CHARLES LLOYD, M.D., Past Professor of Materia Medica in the Eclectic Medical College of New York. Subject: "The Medicinal Properties and Uses of Some of our Native Plants."

Dec. 7—WILLIAM J. BALDWIN, C.E., Member of the American Society of Civil Engineers. Subject: "Fresh Air in our Homes, Schools and Public Buildings."

Dec. 14—Prof. Charles P. Berkey, Ph.D., of Columbia University. Subject: "Genetic Distinctions in the Constituents of Rocks and Ores."

Dec. 21—NORMAN TAYLOR, Curator of Plants, Brooklyn Botanic Garden. Subject: "The Effects of Geology on our Local Flora."

Jan. 11—CHARLES LLOYD, M.D. Subject: "The Medicinal Properties and Uses of Some of our Native Plants."

Jan. 25—Prof. IRVING W. FAY, Ph.D., President of the Department of Chemistry. Subject: "The Chemistry of Colloids."

Feb. 1—Prof. WILLIAM O. CROSBY, Massachusetts Institute of Technology. Paper on "The Geological Relations of the Ground Water of Long Island," read by GEORGE E. ASHBY.

Feb. 8—GEORGE H. SHULL, Carnegie Institution of Washington, Station for Experimental Evolution, Cold Spring Harbor, L. I. Subject: "The Significance of Cross- and Self-Fertilization in Evolution."

Feb. 15—E. W. VIETOR, M.D., Secretary of the Bird Lovers' Club. Subject: "The Birds of Prospect Park,"

Mar. 1—Miss ANTONIA C. MAURY, of Hastings-on-Hudson. Subject: Variability and Revolution."

Mar. 22—GARDNER L. VAN DUSEN. Subject: The Helderberg Formation."

Mar. 29—Prof. EDGAR L. DICKERSON, of the Manual

Training and Technical High School, Newark, N. J. Subject: "Aquatic Insects."

Apr. 5—E. W. VIETOR, M.D. Subject: "The Birds of Prospect Park."

Apr. 19—GARRETT P. SERVISS, B.S., Vice-President of the Department of Astronomy. Subject: "The Moon; is it a Dead World?"

II. The Science Room in the Academy is being provided gradually with a Reference Library, cases, apparatus, work tables and reading tables. It is the intention of the Scientific Departments to make the room a home for scientific men and women. On nearly every Saturday evening throughout the season informal meetings are held at which some subject of interest is presented and illustrated.

### BROOKLYN INSTITUTE CHESS CLUB

#### *Officers for 1913-1914*

ASA W. PARKER	President
BAYARD S. LITCHFIELD	<i>Vice-Presidents</i>
EDWARD BEHR	
C. LANSING HAYS	<i>Secretary</i>
SYLVESTER M. WEIMER	<i>Treasurer</i>

#### *Executive Committee*

ASA W. PARKER	HARRY ZIRN
EDWARD BEHR	BAYARD S. LITCHFIELD
REUBEN GOLDSMITH	WILLIAM A. COWAN
C. LANSING HAYS	EDWARD CORNELL
SYLVESTER M. WEIMER	

#### *House Committee*

EDWARD TAYLOR, *Chairman*

JOHN J. HOLZINGER W. ELWOOD BRUSH

#### *Membership Committee*

ASA W. PARKER, *Chairman*

WILLIAM WALCHER LEO SCHMIDT

*Committee on Tournaments and Team Matches*  
**HARRY ZIRN, Chairman**

**HERMANN HELMS**

**J. T. JANSON**

At a meeting held in the Academy of Music on Saturday evening, January 28, 1911, the permanent organization of the BROOKLYN INSTITUTE CHESS CLUB was effected. A Constitution and By-Laws were adopted, and officers elected. Twenty-eight members were enrolled at this meeting. The charter membership roll was closed on March 1 with a total of sixty-six in number. The present membership is ninety-one.

The room occupied by the Chess Club is centrally located for the entire City of New York, being quickly reached by the subway, elevated and surface lines. The room is provided with chess-men, chess-boards, a library on chess and is managed by its own members, through officers and committees duly elected. Any person who is a Member of the Institute may be a candidate for election to the Club. There is no extra expense attached to Membership in the Chess Club.

I. Simultaneous Chess Exhibition by JOSE R. CAPABLANCA holder of the titles of Cuban Champion, Pan-American Champion, New York State Champion.

II. The Club Room was open, and Members met for purposes of play on Saturday afternoons and evenings from September 14 to June 21.

**SECTION ON PHILATELY**

*Officers for 1913-1914*

Dr. THADDEUS P. HYATT, D.D.S.	<i>President</i>
HENRY A. TALBOT	<i>Vice-President</i>
JOHN D. CARBERRY	<i>Secretary and Treasurer</i>
GEORGE W. RING	<i>Curator and Librarian</i>

*Executive Committee*

THADDEUS P. HYATT, D.D.S.	GEORGE W. RING
JOHN D. CARBERRY	LOUIS F. C. SCHMIDT
ANSELM KRASSA	WILLIAM H. SUSSDORFF
DAVID MINALDI	J. M. ANDREINI
WILLIAM PETERS	HENRY A. TALBOT

This Section was organized September 16, 1898, by the Members of the Long Island Philatelic Society of Brooklyn. Its present membership is forty.

The work of the Section has been as follows:

Business meetings, lectures, conferences, discussions and exhibitions were held on such Friday evenings of each month, from October to May, inclusive, as were designated by the President of the Section.

Philatelic lectures, illustrated with handsomely colored lantern photographs, by means of which each stamp, after being thrown upon the screen, is shown over two feet in height, bringing out clearly every variation in design, perforation, grille, secret mark, etc., form an entirely new and interesting feature of the work of the Philatelic Section.

#### DONATIONS, 1908-1909

Important contributions to the Collection of the Stamps of the world for the Museum were made during the year by different foreign governments.

The total number of Stamps now in the Collection is upwards of 11,000.

#### CASES FOR THE MUSEUM PHILATELIC COLLECTION

The first of the mahogany Philatelic cases, containing 25 drawers, 2 feet 4 inches by 2 feet  $\frac{1}{2}$  inch in size, now holding approximately 6,000 stamps, has been installed, and the stamps mounted therein may be seen at the Museum Building on Eastern Parkway. Each drawer is covered with glass, which fits closely to the stamps to pre-

vent curling, and is so designed as to allow the drawer to be pulled out to a certain distance to expose the stamps to view—at the same time being locked to prevent abstraction. Access to the drawers can be had only through the Curator-in-Chief. More of these cases will be constructed as they may be required from time to time. A widespread interest in the collections was manifested by the public during the past year.

#### INFORMATION

Any information concerning the Section on Philately, its work, membership, etc., may be had by addressing the Secretary thereof, JOHN D. CARBERRY, 822 Greene Avenue, Brooklyn, N. Y.

#### JAMAICA BRANCH

*Executive Committee for 1913-1914*

Hon. BURT J. HUMPHREY  
H. W. CLUTH

*Chairman*  
*Secretary*

WILLIAM C. BAKER	Rev. ANDREW MAGILL
Mr. JESSE BROWNE, Jr.	Miss IDA MAYER
E. G. BULLARD	Miss LILLIE MAYER
GEORGE W. CONABLE	ERNEST A. MAYNARD
Mrs. CHARLES A. COREY	H. G. McDONOUGH
Mrs. JOHN KENDALL DUNN	A. C. McLACHLAN, Ph.D.
Miss FLORENCE M. EVANS	H. S. RUSHMORE
Miss MAY B. HUNTING	WILLIAM A. WARNOCK
Dr. R. S. KEYSER	JOHN WEINBERGER
Miss CARRIE A. LEWIS	PHILIP M. WOOD
W. D. LLEWELLYN	Miss ANNIE S. WYCKOFF

The JAMAICA BRANCH of the Institute was organized during the last part of 1907. The present membership is two hundred and fourteen.

The work of the Branch has been as follows:

Oct. 25—Concert by THE MADRIGAL QUARTETTE OF NEW YORK. Miss MARIE STODDART, Soprano; Mme. BRETT-

SELLECK, Contralto; Dr. ION JACKSON, Tenor; Dr. CARL E. DUFFT, Basso. Miss HELEN WOLVERTON, at the Piano. Programme: Song Cycle, "In a Persian Garden."

Nov. 1—Dramatic Reading by JAY DWIGGINS, of Indiana. Subject: James Whitcomb Riley's "Hoosier Folk Lore," "Child Rhymes and Eerie Fantasies."

Nov. 8—Lecture by Mrs. ANNA GARLIN SPENCER, of New York. Subject: "Woman Suffrage: Why, When and How."

Nov. 15—Lecture by ERNEST THOMPSON SETON, of New York. Subject: "The Wild Animal Life of the Rockies in the United States and Canada," illustrated by lantern photographs.

Nov. 22—Concert by THE TOLLEFSEN TRIO: Mme. SCHNABEL TOLLEFSEN, Piano; PAUL KEFER, 'Cello; CARL H. TOLLEFSEN, Violin.

Nov. 29—Lecture by Prof. TOYOKICHI IYENAGA, Ph.D., of Tokyo. Subject: "Japan of Today," illustrated by lantern photographs.

Dec. 6—Dramatic Reading by Mrs. BERTHA KUNZ BAKER, of New York. Subject: "Milestones," a Drama by Arnold Bennett and Edward Knoblauch.

Dec. 13—Lecture by HENRY OLDYS, of Washington, D. C. Subject: "Bird Notes."

Dec. 20—Concert by PAUL DUFAUT, Tenor, Miss CLARA KLOBERG, Violin; Mrs. EDITH MILLIGAN KING, Piano.

Jan. 3—Lecture by Dr. YAMEI KIN, of China. Subject: "Social and Political Conditions in China."

Jan. 10—Concert by Mme. HILDEGARD HOFFMANN HUSS, Soprano, and HENRY HOLDEN HUSS, Piano.

Jan. 17—Lecture by GARRETT P. SERVISS, B.S. Subject: "Napoleon," illustrated by lantern photographs.

Jan. 24—Lecture-Reading by Miss BEATRICE FORBES-

ROBERTSON, of New York. Subject: "The Feminist Movement in the Drama."

Jan. 31—Concert by THE PHILHARMONIC TRIO: ALEXANDER RIHM, Piano; MAURICE KAUFMAN, Violin; BEDRICH VÁSKA, 'Cello.

Feb. 7—Lecture by ALFRED W. MARTIN, M.A., S.T.B., of New York. Subject: "Florence, the Home of Art," illustrated by lantern photographs.

Feb. 21—Lecture Recital by CARL FIQUÉ, of Brooklyn. Subject: "Richard Wagner's 'Parsifal.' "

Feb. 28—Dramatic Reading by Mrs. ELIZABETH POOLER RICE, of Boston. Subject: "Miss Hobbs," by JEROME K. JEROME.

Mar. 7—Song and Piano Recital by Miss LAURA LOUISE COMBS, Soprano; EDWIN O. SWAIN, Barytone; Mrs. EDITH MILLIGAN KING, Piano.

Mar. 14—Lecture by LEON H. VINCENT, M.A., of Boston. Subject: "Oliver Wendell Holmes."

Mar. 28—Lecture by B. R. BAUMGARDT, of Los Angeles. Subject: "The Fjelds and Fjords of Norway," illustrated by lantern photographs.

Apr. 4—Lecture by Prof. JEROME H. RAYMOND, M.A., Ph.D., of Chicago. Subject: "Constantinople and the Disintegration of the Turkish Empire."

The meetings of this Branch are held in Masonic Hall, Union Avenue, Jamaica.

### GARDEN CITY BRANCH

#### *Executive Committee*

H. S. ORR

*Chairman*

A. J. SMITH

*Vice-Chairman*

J. H. MILLS

*Secretary*

GAGE E. TARBELL	Mrs. DAVID PROVOST
SANFORD C. BOLLING	Mrs. NICOLL FLOYD
MARTIN H. DAY	Mrs. C. E. GARDINER
Mrs. GEORGE L. HUBBELL	Mrs. A. VAN CORTLANDT, Jr.
RALPH PETERS	JOHN H. MILLS
WALTER H. PAGE	ADELBERT J. SMITH
H. S. ORR	Mrs. C. P. TURNER
Miss MIRIAM S. BYTEL	

The GARDEN CITY BRANCH of the Institute was organized in October, 1908.

The work of the Branch has been as follows:

Oct. 24—Concert by THE MADRIGAL QUARTETTE of New York. Miss MARIE STODDART, Soprano; Mme. BRETT-SELLECK, Contralto; Dr. ION JACKSON, Tenor; Dr. CARL E. DUFFT, Basso. Miss HELEN WOLVERTON, at the Piano. Programme: Song Cycle "In a Persian Garden."

Nov. 14—Lecture by ERNEST THOMPSON SETON, of New York. Subject: "The Wild Animal Life of the Rockies in the United States and Canada," illustrated by lantern photographs.

Nov. 21—Concert by THE TOLLEFSEN TRIO: Mme. SCHNABEL-TOLLEFSEN, Piano; PAUL KEFER, 'Cello; CARL H. TOLLEFSEN, Violin.

Dec. 5—Lecture by Prof. TOYOKICHI IYENAGA, Ph.D., of Tokyo. Subject: "The Japan of Today," illustrated by lantern photographs.

Dec. 19—Concert by PAUL DUFAUT, Tenor; Miss CLARA KLOBERG, Violin; Mrs. EDITH MILLIGAN KING, Piano.

Jan. 9—Lecture by Dr. YAMEI KIN, of China. Subject: "Social and Political Conditions in China."

Jan. 30—Chamber Music Concert by THE PHILHARMONIC TRIO: CARL BRUCHHAUSEN, Piano; MAURICE KAUFMAN, Violin; BEDRICK VÁSKA, 'Cello.

Feb. 13—Lecture by ARTHUR STANLEY RIGGS,

F.R.G.S., of New York. Subject: "The French Chateau District," illustrated by lantern photographs.

Feb. 27—Lecture by LEON H. VINCENT, M.A., of Boston. Subject: "Henry Thoreau."

Mar. 13—Song and Piano Recital by Miss LAURA LOUISE COMBS, Soprano; EDWIN O. SWAIN, Barytone; Mrs. EDITH MILLIGAN KING, Piano.

Apr. 3—Lecture by Prof. JEROME H. RAYMOND, M.A., Ph.D., of Chicago. Subject: "Constantinople and the Disintegration of the Turkish Empire," illustrated by lantern photographs.

The meetings of the Branch were held in the Assembly Room, Garden City Club.

### HUNTINGTON BRANCH

*Executive Committee for 1913-1914*

HIRAM BAYLIS	Miss SARAH MAYBEE
Mrs. JAMES M. BRUSH	Miss SARAH A. MURPHY
Mrs. LOUIS M. BRUSH	Dr. B. P. MCLEAN
DOUGLASS CONKLIN	Miss NETTIE PEARSALL
Miss LAVINIA CONKLIN	C. P. ROGERS
Miss JOSEPHINE CONKLIN	Mrs. EDGAR A. SAMMIS
JAMES H. CONKLIN	Mrs. FREDERICK B. SAMMIS
REV. C. E. CRAGG	Mrs. IRVING SAMMIS
Dr. G. M. CARTER	Rev. S. H. SEEN
Mrs. GERTRUDE C. DAVENPORT	CHARLES E. SHEPARD
Dr. CHARLES B. DAVENPORT	GEORGE H. SHULL
WILLIAM S. FUNNELL	R. K. TOAZ
WALTER S. FUNNELL	Rev. JOHN C. YORK
EDWARD S. IRELAND	Hon. THOMAS YOUNG
J. JEFFREY JOHNSTONE, Ph.D., F.R.G.S.	

The HUNTINGTON BRANCH of the Institute was organized in November, 1908.

The present membership is one hundred and one.

The work of the Branch has been as follows:

Oct. 22—Concert by THE MADRIGAL QUARTETTE OF

NEW YORK: Miss MARIE STODDART, Soprano; Mme. BRETT-SELLECK, Contralto; Dr. ION JACKSON, Tenor; Dr. CARL E. DUFFT, Basso. Miss HELEN WOLVERTON, at the Piano. Programme: Song Cycle "In a Persian Garden."

Oct. 29—Dramatic Reading by Miss RETTA STECK, of New York. Subject: "A Miscellaneous Programme, American and English Authors."

Nov. 13—Lecture by ERNEST THOMPSON SETON, of New York. Subject: "The Big Game of the Rocky Mountains," illustrated by lantern photographs.

Nov. 19—Concert by THE TOLLEFSEN TRIO: Mme. SCHNABEL TOLLEFSEN, Piano; PAUL KEFER, 'Cello; CARL H. TOLLEFSEN, Violin.

Nov. 26—Lecture by Prof. TOYOKICHI IYENAGA, Ph.D., of Tokyo. Subject: "Japan of Today," illustrated by lantern photographs.

Dec. 3—Dramatic Reading by Mrs. BERTHA KUNZ BAKER, of New York. Subject: "Milestones," a Drama by Arnold Bennett and Edward Knoblauch.

Dec. 10—Lecture by HENRY OLDYS, of Washington, D. C. Subject: "Bird Notes."

Dec. 18—Concert by PAUL DUFALT, Tenor; Miss CLARA KLOBERG, Violin; Mrs. EDITH MILLIGAN KING, Piano.

Jan. 14—Lecture by B. R. BAUMGARDT, of Los Angeles, California. Subject: "An Evening with the Stars," illustrated by lantern photographs.

Jan. 21—Lecture by Miss BEATRICE FORBES-ROBERTSON, of New York. Subject: "Woman Suffrage and Democracy."

Jan. 28—Chamber Music Concert by THE PHILHARMONIC TRIO: CARL BRUCHHAUSEN, Piano; MAURICE KAUFMAN, Violin; BEDRICH VÁSKA, 'Cello.

Feb. 4—Piano and Song Recital by Mme. HILDEGARD

HOFFMANN HUSS, Soprano, and HENRY HOLDEN HUSS, Piano.

Feb. 11—Lecture by FARNHAM BISHOP. Subject: "The Panama Canal," illustrated by lantern photographs.

Feb. 18—Lecture by CARL FIQUÉ, of Brooklyn. Subject: "Richard Wagner's 'Parsifal.'"

Feb. 25—Lecture by LEON H. VINCENT, M.A., of Boston. Subject: "Tom Moore, the Drawing Room Minstrel."

Mar. 4—Song and Piano Recital by Miss LAURA LOUISE COMBS, Soprano; EDWIN O. SWAIN, Barytone; Mrs. EDITH MILLIGAN KING, Piano.

Mar. 26—Lecture by ARTHUR STANLEY RIGGS, F.R.G.S., of New York. Subject: "The French Château District," illustrated by lantern photographs.

Apr. 1—Lecture by Prof. JEROME H. RAYMOND, M.A., Ph.D., of Chicago. Subject: "Constantinople and the Disintegration of the Turkish Empire."

Apr. 8—Concert by the HUNTINGTON ORCHESTRAL SOCIETY, Rev. CHARLES E. CRAGG, Conductor, assisted by Mrs. FLORA B. LYON, Soprano.

The meetings of this Branch are held in the Parish House, St. John's Church.

#### TABLE SHOWING THE MEMBERSHIP OF THE INSTITUTE

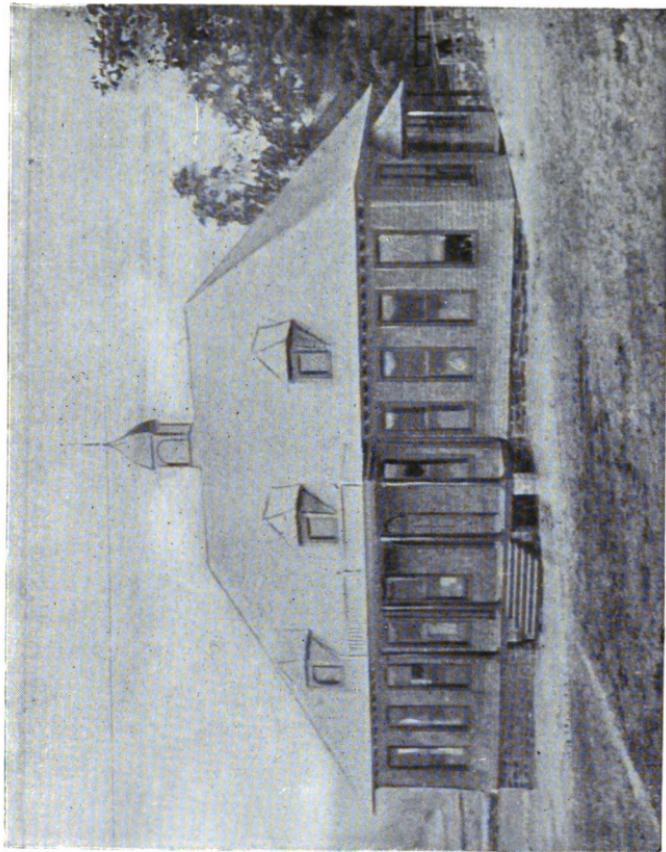
1912-1913

Associate Members .....	6,119
Life Members .....	356
Permanent Members .....	77
Corresponding Members .....	245
Honorary Members .....	23
Fellows .....	36
Patrons .....	21
	6,877

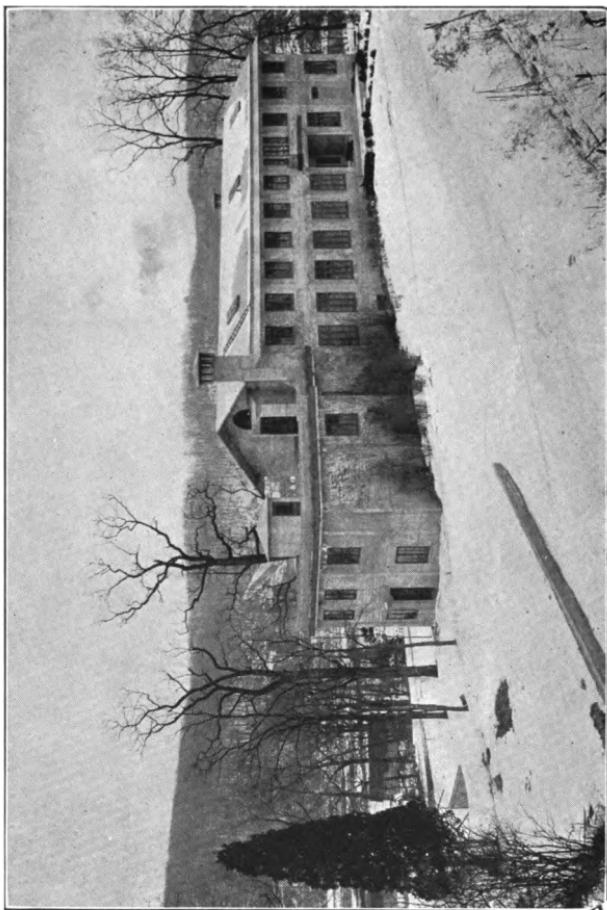
Persons who have resigned, but were for a time on the Roll, during 1912-1913 .....	321
New Members (included above) .....	620
Resignations (including the above 321).....	610

TABLE SHOWING THE MEMBERSHIP OF THE DEPART-  
MENTS, SECTIONS AND CLUBS

Departments	1911-12	1912-13	Order of size
AGRICULTURE .....	5	27	31
ARCHITECTURE .....	201	194	16
ASTRONOMY .....	258	259	13
BOTANY .....	262	269	12
CHEMISTRY .....	188	186	17
DOMESTIC SCIENCE .....	467	471	8
DRAMATIC ART .....	...	35	30
ELECTRICITY .....	223	223	15
ENGINEERING .....	173	168	18
ENTOMOLOGY .....	43	43	28
ETHNOLOGY .....	97	94	24
FINE ARTS .....	1,240	1,201	3
GEOGRAPHY .....	601	606	6
GEOLGY .....	155	150	20
LAW .....	270	251	14
MATHEMATICS .....	102	103	23
MICROSCOPY .....	97	93	25
MINERALOGY .....	77	78	27
MUSIC .....	2,630	2,586	1
PAINTING .....	314	309	9
PEDAGOGY .....	699	684	5
PHILOLOGY .....	1,449	1,486	2
PHILOSOPHY .....	302	299	10
PHOTOGRAPHY .....	503	508	7
PHYSICS .....	124	127	21
POLITICAL SCIENCE .....	816	816	4
PSYCHOLOGY .....	294	285	11
SOCIOLOGY .....	157	162	19
ZOOLOGY .....	103	109	22
SECTION ON PHILATELY.....	44	40	29
CHESS CLUB .....	82	91	26
 TOTAL .....	 11,916	 11,953	



THE JOHN D. JONES LABORATORY BUILDING, COLD SPRING HARBOR, 72x36 FEET.



BLACKFORD HALL IN WINTER, GENERAL DINING HALL AND WOMEN's DORMITORY

# THE BIOLOGICAL LABORATORY

(Located at Cold Spring Harbor, L. I.)

TWENTY-FOURTH SEASON  
JULY AND AUGUST, 1913

## BOARD OF MANAGERS

### *Executive Committee*

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HENRY F. NOYES.....*Vice-President*  
Prof. FRANKLIN W. HOOPER, M.A., LL.D....*Secretary*  
CHARLES B. DAVENPORT, Ph.D.....*Director*

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OLIVER L. JONES, M.D.	Judge ADDISON BROWN
Hon. DAVID A. BOODY	Prof. JOHN MICKLEBOROUGH, Ph.D.
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WALTER B. JAMES, M.D.	AUGUST HECKSCHER
ROBERT W. DE FOREST	ALFRED G. MAYER, D.Sc.
WALTER JENNINGS	EDWARD THOMPSON
CLARENCE W. SEAMANS	Prof. GRAHAM LUSK, Ph.D.
Prof. EDMUND B. WILSON, Ph.D.	RUDOLPH FLINSCH
FREDERIC A. LUCAS	Col. TIMOTHY S. WILLIAMS
Mrs. EUGENE G. BLACKFORD	HERMAN STUTZER
Miss CORNELIA PRIME	GUSTAV STRAUBENMÜLLER
HENRY W. DE FOREST	DONALD SCOTT
J. STANLEY BROWN	HOWARD C. SMITH

## THE BOARD OF INSTRUCTION

C. B. DAVENPORT, Ph.D., Carnegie Instituton of Washington,  
*Director of the Laboratory.*  
HENRY S. PRATT, Ph.D., Haverford College. *In charge of Comparative Anatomy.*  
HERBERT E. WALTER, Ph., D., Brown University. *In charge of Field Zoölogy.*  
Mrs. ALICE HALL WALTER. *In charge of Bird Study.*  
HARLAN H. YORK, Ph.D., Brown University. *In charge of Cryptogamic Botany.*

HARRY HAMILTON LAUGHLIN, B.S., Eugenics Record Office. *In charge of Training Course for Field Workers in Eugenics.*

JOHN W. HARSHBERGER, Ph.D., University of Pennsylvania. *In charge of Plant Geography and Ecology.*

A. L. MELANDER, Ph.D., University of Washington. *Instructor in Field Entomology.*

C. E. EHINGER, M.D., Penn. State Normal School. *Associate in Bird Study.*

W. E. MANEVAL, Ph.D., Randolph-Macon College. *Associate in Cryptogamic Botany.*

DAVID D. WHITNEY, Ph.D., Wesleyan University. *Associate in Comparative Zoölogy.*

PERSONS, OTHER THAN INSTRUCTORS, ENGAGED PRIMARILY IN RESEARCH.

CHARLES HOMER ARNDT, Annville, Pa. Student. *Zoölogy.*

ANNIE PARKER HENCHMAN, Jaffrey, N. H. *Zoölogy.*

HARRISON RANDALL HUNT, S.B. (Allegheny College); A.M. (Harvard), 464 Park Avenue, Meadville, Pa., Student at Harvard. *Zoölogy.*

CHARLES WILLIAM METZ, B.S. (Pomona College), Sheridan, Wyoming. Student at Columbia University. *Zoölogy.*

MINNIE ELIZABETH WATSON, M.S. (Illinois), Oyster Bay, Long Island. Student at University of Illinois. *Zoölogy.*

ALICE WILSON WILCOX, A.B. (Vassar); A.M. (Brown), 56 Alumni Avenue, Providence, R. I. Director of Fairbanks Museum of Natural History. *Zoölogy.*

STUDENTS IN THE SEVERAL COURSES.

ROY CROWDY AVERY, 335 Henry Street, Brooklyn, N. Y. Student. *Field Zoölogy.*

EDITH BOUGHER, Caldwell, N. J. Teacher of Biology and History. *Field Zoölogy.*

ELIZABETH JACQUES BOWEN, Syosset, Long Island. Student. *Special course in Plant Geography and Ecology.*

HOWARD HIESTAND MINNISH BOWMAN, Ph.D. (Franklin and Marshall College), 740 Chester Avenue, Lancaster, Pa. Research and instructor in Franklin and Marshall College. *Plant Geography and Ecology.*

CHARLES SIDNEY BURWELL, 540 Chestnut Street, Meadville, Pa. Student at Allegheny College. *Field Zoölogy.*

ANNA MATILDA CONNELLY, A.M. (Columbia University), 815 Green Street, Harrisburg, Pa. Assistant in Biology and Chemistry. Rockford College. *Plant Geography and Ecology.*

FLORENCE HARRIS DANIELSON, A.B. (Mount Holyoke); M.A. (Brown University), Danielson, Conn. Field worker in eugenics. *Field Zoölogy.*

JANE MYRTLE FISHER, 534 Winfield Street, Pittsburgh, Pa. Student at the University of Pittsburgh. *Field Zoölogy.*

FLORENCE WENONAH GARRISON (Bloomsburg S. N. S. and State College Certific.), 108 Vaughn Street, Kingston Sta., Wilkes-Barre, Pa. Science instructor in high school. *Comparative Anatomy and Bird Study.*

EDNA NEWMAN HAVER, A.B. (Wilson College), 242 Fifth Avenue, Chambersburg, Pa. Assistant in Department of Biology, Wilson College. *Comparative Anatomy.*

LENA BONDURANT HENDERSON, B.S. (University of Tennessee), Knoxville, Tenn. Instructor in Botany at the University of Tennessee. *Cryptogamic Botany.*

HAROLD MORTON HINE, B.S. (Wesleyan University), 40 Deerfield Avenue, Hartford, Conn. High school instructor. *Field Zoölogy.*

IRA VAUGHAN HISCOCK, Farmington, Me. Student at Wesleyan University. *Field Zoölogy.*

LENA MAY HOERNER, A.B. (Lebanon Valley College), R. F. D. No. 6, Carlisle, Pa. Teacher of Science. *Cryptogamic Botany.*

MARCELLA M. ISHRANT, Syosset, L. I. Tutoring. *Special course in Ecology and Plant Geography.*

ROBERT MENDON LORD, 34 Cushing Street, Providence, R. I. Student. *Field Zoölogy.*

MATHILDE LOUISE MAYER, 37 Lincoln Road, Brooklyn, N. Y. Student. *Comparative Anatomy.*

CHARLES WARNER PALMER, A.B. (Cornell), Westtown, Pa. Student at the University of Pennsylvania. *Cryptogamic Botany.*

ELIZABETH DEKALB PEASE, Ph.B. (Western Reserve University), 38 Orkney Road, Brookline, Mass. Teacher. *Field Zoölogy.*

STANLEY JAMES ROWLAND, Shelburne Falls, Mass. Student at Brown University. *Field Zoölogy.*

EDNA GRACE TATNAL, A.B. (Pennsylvania College for Women), 327 Peffer Street, Harrisburg, Pa., Teacher of Zoölogy in Harrisburg High School. *Field Zoölogy.*

ISABEL HAWKINS TUTHILL, Rocky Point, N. Y. Student. *Comparative Anatomy.*

WILLIAM ALONZO WHITING, Conneautville, Pa., Route 32. Teacher. *Field Zoölogy.*

### EUGENICS

ELIZABETH LOVERING BARRIS, 1143 Main Street, Davenport, Iowa. Social Worker. *Eugenics.*

CATHARINE WETHERILL BEEKLEY, B.S. (University of Pennsylvania), 116 N. Lemon Street, Media, Pa. Teacher. *Eugenics.*

ANNE BURNET, M.D. (Northwestern Woman's Medical College), R. F. D. No. 3, Lincoln, Nebraska. Physician in Milwaukee Sanitarium. *Eugenics.*

GENEVIEVE MARGARET CARR, A.B. (Oberlin College), Sugar Grove, Pa. Student. *Eugenics.*

Mrs. CLAIBORNE G. CATLIN, 2206 Maryland Avenue, Baltimore, Md. *Eugenics.*

MARY CLARK, A.B. (Randolph-Macon Woman's College), Sparrow's Point, Md. High School Teacher. *Eugenics.*

CHARLES HASKELL DANFORTH, A.B. (Tufts, '08); A.M. (Tufts, '10); Ph.D. (Washington University, '12), 1806 Locust Street, St. Louis, Mo. Instructor in Anatomy at Washington University. *Eugenics.*

WILLIAM LARNED DEALY, A.B.; A.M. (Brown), 872 Hope Street. Fellow at Clark University. *Eugenics.*

ELLEN FAULKNER, A.B. (Bryn Mawr), Keene, New Hampshire. *Eugenics.*

DOROTHY BROOKE GARDNER, (Md. State Normal School), 705 Newington Avenue, Baltimore, Md. Elementary Public School Teacher. *Eugenics.*

KATHARINE GAY, A.B. (Barnard College), 205 West 106th Street, New York, N. Y. Private Secretary. *Eugenics.*

FANNIE SABINE GEORGE, A.B. (Mount Holyoke College), Chaumont, New York. Student. *Eugenics.*

PHYLLIS GREENACRE, S.B. (University of Chicago in December, 1913), 1154 West 103d Street, Chicago, Ill. *Eugenics.*

ELIZABETH GREENE, A.B. (Smith), 4 Park Street, Greenfield, Mass. Student. *Eugenics.*

JACOB WALTER GROENDYKE, Litt.D. (Rutgers), Monmouth Junction, N. J. Clerk. *Eugenics.*

FREDERICK ARTHUR HODGE, M.A., Ph.D. (University of Virginia), Thaxton, Va. Professor of Psychology at Winthrop College, Rock Hill, S. C. *Eugenics.*

Mrs. LYDIA HARDY JEWETT (Bridgewater State Normal School), 54 Linden Road, Melrose, Mass. Teacher. *Eugenics.*

DANIEL WOLFORD LARUE, Ph.D. (Harvard), East Stroudsburg, Pa. Teacher of Psychology, State Normal School. *Eugenics.*

HELEN ELIZABETH MARTIN, Ph.B. (Syracuse University), 12 Hall Place, West Quincy, Mass. Charge of Children's Clinic, Boston Dispensary. *Eugenics.*

LAURA THEODOSIA MYERS, M.D. (Tufts University), 14 West 100th Street, New York City. Resident Physician at a Preventorium. *Eugenics.*

MABEL ALIDA ROBEY, 1813 N. Capitol Street, Washington, D. C. Teacher. *Eugenics.*

MINA ANDERSON SESSIONS, A.B. (Mount Holyoke College), Hampden, Mass. Teacher. *Eugenics.*

MYRTLE FRANCES SMART, B.A. (Mount Holyoke College), 427 Essex Street, Bangor, Me. Teacher of English in Norway high school. *Eugenics.*

MARY IRENE STORER, B.A. (Ohio State University), Clyde, Ohio. Student at Ohio State University. *Eugenics.*

ETHEL HINDS THAYER, B.A. (Mount Holyoke College), 14 Carleton Street, Brockton, Mass. Laboratory assistant in Psychology and graduate work. *Eugenics.*

TRACY EMERSON TUTHILL, A.B. '12; A.M. '13 (Oberlin College), Riverhead, N. Y. Student. *Eugenics.*

RUTH MURRAY UNDERHILL, A.B. (Vassar), Ossining, N. Y. Working in Massachusetts Society of Prevention of Cruelty to Children. *Eugenics.*

The Twenty-fifth Session of the Laboratory will be held at Cold Spring Harbor, L. I., from July 1 to August 4 (inclusive), 1914.

#### COURSES OF INSTRUCTION

All courses, except where stated to the contrary, occupy six to seven hours per day. Lectures in all Courses at 8.15 A. M.

#### ZOOLOGY

1—"High School," under Dr. WALTER, Dr. MELANDER, Dr. DAVENPORT, with assistance from others.

1a—"Bird Study," under Mrs. WALTER, with Dr. EHINGER and additional assistance.

- 2—"Comparative Anatomy," under Dr. H. S. PRATT and Dr. D. D. WHITNEY.
- 3—"General Embryology and Microscopical Technique. (Omitted).
- 4—"Animal Bionomics and Evolution," under Dr. DAVENPORT.

## BOTANY

- 1—"Cryptogamic Botany," under Dr. YORK and Dr. MANEVAL.
- 2—"Plant Geography and Ecology," under Dr. HARSHBERGER.

## EUGENICS

- 1—"Eugenics," under Dr. DAVENPORT and Mr. H. H. LAUGHLIN.

## BIOLOGICAL CLUB

A club will be formed, meeting two or three times a week, and open to all members of the Laboratory, for the purpose of giving abstracts of recent biological literature and discussing results. By this means it is hoped that all may be brought into touch with investigation, may get an insight into what biologists are working at today, and may gain some practice in the presentation of papers and in the free discussion of them. The club will be addressed also by visiting naturalists.

## PUBLICATIONS

Means will be provided for the publication of completed researches in the "Science Bulletin" of the Brooklyn Institute of Arts and Sciences, in the "Cold Spring Harbor Monographs," of which seven numbers are issued and two are in preparation, or elsewhere.

The following books and papers, based in whole or in part on work done, or material collected, at Cold Spring Harbor in connection with the Laboratory, have been published during the past two years:

EDITH N. BUCKINGHAM.—Division of Labor among Ants. Proc. Amer. Acad. Arts and Sciences, XLVI, No. 18, Mar. 1911.

GRAFF, L.—Acoela, Rhabdocœla and Allœocœla des Ostens der Vereinigten Staaten von Amerika. Zeitschr. f. wiss Zoöl. XCIX, pp. 322-428, 6 pls. 1911.

SCHAEFFER, ASA A.—Habit formation in frogs. Jour. Animal Behavior. I, 309-335. October, 1911.

W. H. BROWN and L. W. SHARP.—The Embryo sac of Epipactis. Botan. Gazette, LII. No. 6, Dec. 1911.

D. S. JOHNSON and H. H. YORK.—Relation of Plants to Tide-levels. Johns Hopkins Univ. Circular. Feb. 1912.

#### EQUIPMENT

The Laboratory is now in possession of several buildings: 1. A large Laboratory accommodating about sixty students and fitted with aquaria, running salt and fresh water, private rooms, library, etc. 2. A Laboratory building intended exclusively for investigators, containing 13 private rooms, situated about 300 meters from the main plot of ground, and completely equipped. 3. A lecture hall, used for class lectures, public lectures, and club meetings. It is furnished with an electric lantern. In the basement of this building is a dark room for photographing purposes, equipped with running water. 4. Four dormitories, with a total capacity of 75 persons. The rooms in the dormitories are adequately furnished and are supplied with linen and towels. A fireproof dormitory for women with a general dining-hall, finely equipped, has been recently built—a gift to the Laboratory from Mrs. Eugene G. Blackford, as a memorial to Mr. Blackford, the first president of the Board of Managers of the Laboratory. It is connected with a 10,000-

gallon elevated water tank, and with a sewerage system of the Waring type.

The Laboratory is equipped with a 35-foot, 12 horse-power motor boat, capable of making about 8 miles an hour, which runs on almost daily trips through the harbor and sound for purposes of dredging and conveying parties to distant collecting grounds or study areas. In addition, there are small boats, the necessary collecting apparatus, and a storeroom where instruments, stationery, optical apparatus, etc., may be purchased at a price slightly above cost. A limited number of microscopes may be rented at the Laboratory, but each person is urged to bring a dissecting microscope and a compound microscope if possible.

There is a library of both zoölogical and botanical works, particularly including text-books, systematic works, and several hundred books and pamphlets on animal and plant morphology and physiology. The extensive biological library (4,000 volumes) of the adjoining Station for Experimental Evolution is also available for use. There is a card catalogue record of over 1,000 species of animals and plants found near the Laboratory.

The Laboratory is situated in a center of biological activity that is maintained throughout the year. The State of New York maintains here its largest fish hatchery, where many millions of brook trout and tomcod are annually hatched. The Station for Experimental Evolution, Carnegie Institution of Washington, is located on the grounds adjoining those of the Biological Laboratory, and is under the same direction. Twenty acres of land are occupied by gardens, pastures, breeding pens and houses, greenhouses and the main administration building. A scientific staff of six persons is constantly maintained here, and these contribute, through demon-

strations and occasional lectures, to the scientific activity of the Laboratory.

The Eugenics Record Office, devoted to the collection and study of data on human heredity, has been recently established on ground nearby in a tract of about eighty acres.

#### EXPENSES AND AIDS

**Tuition.** The Laboratory fee, including one course of instruction, the general lectures, and the use of the Laboratory privileges, will be \$30. Students who make use of the Laboratory microscopes will be charged \$5 extra.

Board will be furnished to students only, for \$5.00 per week. Board may be furnished to relatives or friends accompanying students, if due notice is given, rate, \$1.00 per day. Rooms in the dormitories cost \$1.50 to \$3.00 per week, according to size and situation. The larger rooms will accommodate two students. A fee of five dollars should accompany each application for the reservation of a room. Diagrams of available rooms, with prices, will be furnished on application. The whole expense to the student for the session will be from \$75 to \$95. Arrangements for married persons and their children may be made by correspondence.

**Scholarships.** Besides the various scholarships offered by colleges and universities to students in their biological departments and applicable to this Laboratory, the following scholarship has been recently established:

The TEMPLE PRIME scholarship established by Miss CORNELIA PRIME, of Huntington, in memory of TEMPLE

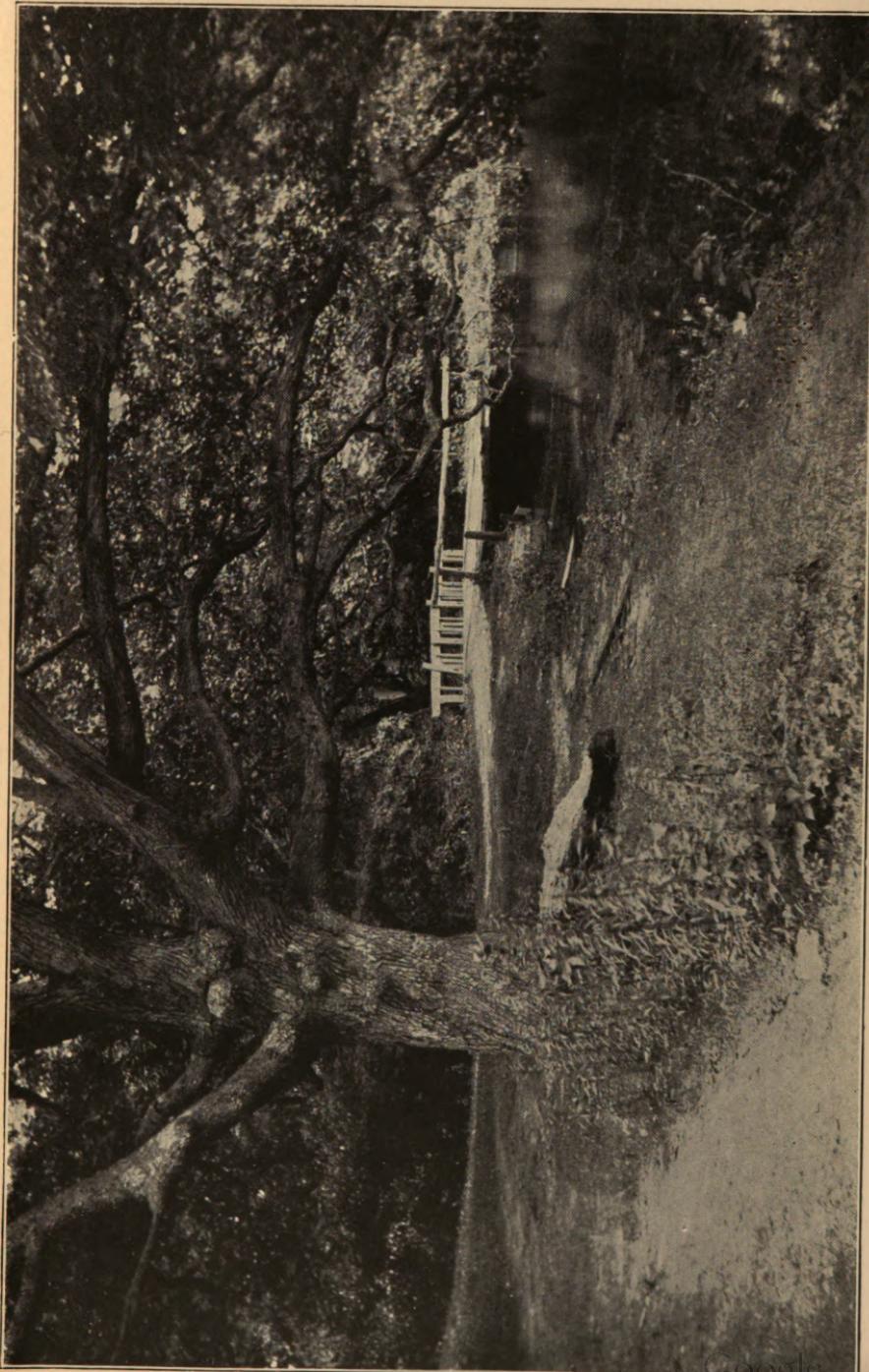
PRIME, a distinguished student of the mollusca. Amount about \$100. Application for the scholarship to be made to the Director of the Laboratory.

A limited number of students can defray the cost of board by waiting on table.

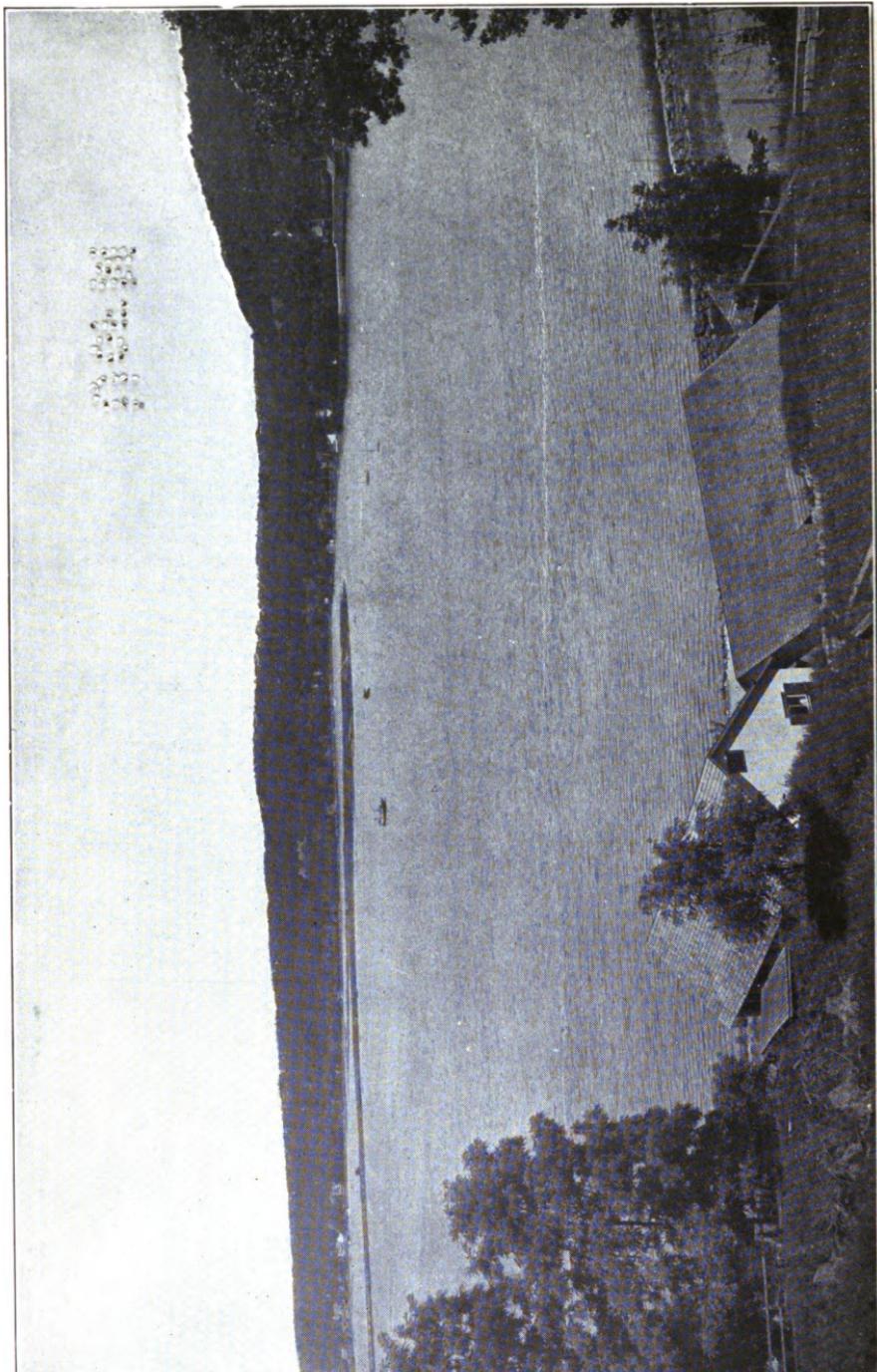
**Suggestions as to Outfitting.** For the benefit of novices at the seashore it is suggested that "outing clothes" are especially to be recommended, including heavy but comfortable shoes or boots, a pair of rubber-soled sneakers, clothing of resistant fabric, a complete modest bathing costume, a raincoat, and provision for cool as well as warm weather.

#### LOCATION

The situation of the Laboratory is unique. It is placed at the head of Cold Spring Harbor, a long and beautiful bay on the north shore of Long Island. This harbor is divided by an interesting beach of sand into an outer and inner basin. The outer basin opens widely into Long Island Sound, whose coast has a varied character for miles in either direction. At the mouth of the inner basin are flats where molluscs, echinoderms and burrowing crustacea and worms are abundant. The inner basin has a muddy bottom, largely exposed at low tide and offering unusual opportunities for collecting bottom animals and plants. The plancton of the inner harbor is exceptionally abundant. Into the head of the inner basin flows Nachaquatuck Creek, in whose estuary the transition from marine to fresh water and to terrestrial organisms may be clearly traced. Further up are four beautiful fresh-water lakes and streams, which contain an abundance of fresh-water organisms. In the valley are found a salt marsh, and above the lakes a sphagnum bog. The shores of the harbor and of the lakes are densely



VIEW OF ROAD OVER THE DAM AT THE SECOND LAKE, TO ILLUSTRATE TYPICAL FOREST AND FRESH WATER CONDITIONS.  
GREAT OAK IN FOREGROUND.



VIEW OF THE INNER HARBOR FROM THE DINING HALL

wooded and exhibit the most diversified fauna and flora. On the upland, over two hundred feet above sea level, are stretches of meadows and gardens. Across the sound are rocky promontories and islets to which visits are made. Twelve miles to the southward, accessible by a trolley line running from the adjacent village of Huntington, is the open Atlantic beating on a great sandy beach covered with sand dunes.

**How to Reach the Laboratory.** The Laboratory lies in the town of Oyster Bay on the north side of Long Island about thirty miles from Manhattan Island, about fifteen miles beyond the nearest part of the boundary of Greater New York, and two miles from the village of Huntington. Persons coming from the West and South will find the Pennsylvania Railroad most convenient, since direct connection is made at its new terminal in Manhattan with trains to Cold Spring Harbor on the Long Island Railroad, changing cars at Jamaica. Those arriving at the Grand Central dépôt may go by cars to the Pennsylvania-Long Island dépôt at West 33d Street and Seventh Avenue, or they may take the New York subway south to its terminus at Atlantic Avenue, where transfer is made to the Long Island Railroad. From the dépôt a short stage ride (25c.) brings one to the Laboratory at Cold Spring Harbor. During the summer months there are ten or more trains a day from the city. From the East, the boat from New London to Greenport, L. I., may be taken; thence by rail to Hicksville, and from Hicksville to Cold Spring Harbor; but persons proposing to make this trip should determine some time in advance the times of sailing of the boat. Ferries across the Sound from Bridgeport to Port Jefferson, and from Rye, N. Y., to Glen Cove, Long Island, are usually operated daily during the summer time.

**SUBSCRIPTIONS FOR ORIGINAL RESEARCH AND EQUIPMENT**

Subscriptions for the support of the Laboratory during the season of 1913 were made as follows:

**SUBSCRIPTIONS, BIOLOGICAL LABORATORY**

1913

William J. Matheson .....	\$200.00
Clarence W. Seamans .....	100.00
Henry F. Noyes .....	100.00
Robert B. Woodward.....	50.00
Walter Jennings .....	100.00
Donald Scott .....	50.00
Wawepex Society .....	30.00
Henry W. De Forest.....	100.00
<hr/>	
	\$730.00

## THE BROOKLYN MUSEUM OF ARTS AND SCIENCES

The MUSEUM BUILDING of the Brooklyn Institute of Arts and Sciences, being erected in Institute Park, faces the Eastern Parkway on the north, Washington Avenue on the east, and will overlook Prospect Park on the south and west.

The plan and design for the building are by the firm of MCKIM, MEAD & WHITE, Architects, and are fully described in the Year Book published by the Institute for the year 1899-1900, a copy of which may be obtained at the office of the Institute, or will be mailed to any address on receipt of the postage, 12 cents.

The building is provided with electric elevators and with electric lights throughout. The location of the Museum of Arts and Sciences near the entrance to Prospect Park, and on park lands, is most desirable. THE FIRST SECTION of the Building was completed and ready for occupancy in May, 1897. It is 193 feet long, with an average width of 55 feet, and its walls rise 95 feet above the ground. The basement story contains Exhibition Rooms, Offices, and Storage Rooms. The first story is 27 feet in height, and contains the Hall of Greek Sculpture and Architecture, 110 x 38 feet; the Hall of Græco Roman Sculpture, 42 x 42 feet, and two smaller galleries, 16 x 40 feet. The second floor contains four Exhibition Rooms for the Long Island and general vertebrate faunas; the first is 110 x 38 feet, the second is 42 x 42 feet, and the remaining rooms are each 16 x 40 feet. The third floor contains four Galleries for Paintings, respectively 110 x 38 feet, 42 x 42 feet, 16 x 40 feet, and 16 x 38 feet. The Picture Galleries are lighted by skylights, and are 24 feet in height.

The SECOND or CENTRAL SECTION of the North Front of

the Museum Building was completed on February 11, 1905. Collections were installed in it during March, April, and May, and it was formally opened to the public on June 1st. The Central Section is four stories in height and is approximately 138 x 120 feet on the ground. The basement and mezzanine floors contain an auditorium with a seating capacity of 1,325 persons, together with foyers and storage rooms. The main or first floor is a single large hall or general vestibule for the entire Museum. It is 134 feet in extreme length and 100 feet deep, and 29 feet in height, and has been set apart as a Hall of Sculpture. The second floor contains portions of the collections in Natural History, and the upper floor or dome-room of the Museum is reserved for collections illustrating the Art of the Italian Renaissance.

The THIRD SECTION or EASTERN WING of the Museum was completed early in 1907. It is similar in character to the First Section or Western Wing, but has a sub-basement and cellar in addition to the rooms in the First Section.

The Third Section was dedicated on December 14, 1907, and was formally opened to the public on that date.

The FOURTH SECTION. Ground was broken for the Fourth Section on June 22, 1911. Appropriations covering the cost of the foundations and of the exterior and steel frame of these have been made by the city.

The Museum is provided with a power house, completed in March, 1905; and the front steps and central approach from the Eastern Parkway were completed in 1906.

#### RULES GOVERNING ADMISSION TO THE MUSEUM

I. The exhibition halls of the Museum of the Brooklyn Institute of Arts and Sciences shall be open free to the

public from 9 A. M. to 6 P. M. on Wednesday, Thursday, Friday, and Saturday of each week, and on all legal holidays, except Sunday; also on Thursday of each week from 7.30 to 9.45 P. M., and on Sunday afternoons from 2 until 6 o'clock.

II. The exhibition halls of the Museum Building shall be open to the public on the payment of an admission fee on Mondays and Tuesdays from 9 A. M. to 6 P. M. throughout the year, and may be open on special occasions on Monday and Tuesday evenings. The admission fee on Mondays or Tuesdays, day and evening, shall be regularly twenty-five cents for adults, and ten cents for children under the age of sixteen. On the occasion of the opening exhibition of new or loan collections, the admission fee may be increased on these days to a sum not exceeding one dollar.

III. The exhibition halls of the Museum Building shall be open and free to the public and private schools of the City of New York each week day from 9 A. M. until 6 P. M. and from 2 until 6 on Sunday afternoons.

IV. The Board of Trustees of the Brooklyn Institute of Arts and Sciences may issue to specialists or students engaged in study or research at the Museum Building permits to enter the said building and to use collections contained therein on Mondays and Tuesdays between the hours of 9 A. M. and 6 P. M. without cost, subject to such rules and precautions as may be necessary to protect the property contained in said building.

V. To each person making a subscription to the Museum Collection Fund, and to each person making a donation to the collections of the Museum in any given year; to the members of the Board of Trustees of the Institute, and to persons designated by the Executive

Committee of said Board of Trustees, a ticket admitting to the Museum on Mondays and Tuesdays, good for one year, shall be issued.

Each Life Member of the Institute shall be entitled, on application to the Director of the Institute, to receive such number of Complimentary Tickets, not exceeding ten (10), annually as he may desire, and each such Complimentary Ticket issued shall entitle the bearer to one free admission on Monday or Tuesday.

The immediate charge of the internal administration of the Museums of the Institute is placed with the Curator-in-Chief of the Museums.

The attendance at the Central Museum during the year ending June 1, 1913, was 228,519.

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## THE CHILDREN'S MUSEUM AND LIBRARY

BEDFORD PARK, BROOKLYN AVENUE

The Board of Trustees, on the recommendation of the Council and with the approval of the Hon. GEORGE V. BROWER, Park Commissioner, in 1899, established in the Bedford Park Building, in Bedford Park, on Brooklyn Avenue, a CHILDREN'S MUSEUM and a CHILDREN'S MUSEUM LIBRARY. Fourteen rooms, together with the hallways communicating therewith, have been fitted up for the use of the collections and library of this Museum. The cases and furniture have been constructed as models for a children's museum, and appropriate collections of specimens, charts, and books have been brought together and installed.

The Museum was first opened to the public on December 16, 1899. It is now open free to the public from 9 A. M. until 5.30 P. M. each week-day, and from 2 until 5.30 Sunday afternoons.

## ATTENDANCE.

Dec. 16 to June 1, 1900.....	28,635
Year ending June 1, 1901.....	79,756
Year ending June 1, 1902.....	84,485
Year ending June 1, 1903.....	110,834
Year ending June 1, 1904.....	95,738
Year ending June 1, 1905.....	88,413
Year ending June 1, 1906.....	93,132
Year ending June 1, 1907.....	92,996
Year ending June 1, 1908.....	97,805
Year ending June 1, 1909.....	125,708
Year ending June 1, 1910.....	133,919
Year ending June 1, 1911.....	152,815
Year ending June 1, 1912.....	163,719
Year ending June 1, 1913.....	186,823

The immediate charge of the Children's Museum Collection is placed with the Curator, Miss ANNA B. GALLUP, B.Sc., and her assistants; and the immediate charge of the Children's Museum Library is with the Librarian, Miss MIRIAM S. DRAPER, and her assistant.

#### LECTURES CONNECTED WITH THE CHILDREN'S MUSEUM WORK

Lectures and short talks on the Natural and Physical Sciences are given by the officers of the Museum. These lectures and talks are carefully illustrated by the collections of the Museum and are very helpful to the Nature Study and other Science work done in the schools.

Arrangements may be made whereby classes of students may receive these lectures at appointed hours, the classes being in charge of their teachers respectively.

#### CLASS INSTRUCTION BY TEACHERS

Teachers who wish to bring their classes to the Children's Museum are privileged to do so at any time when the Mu-

seum is open to the public. Teachers should make arrangements with the Curator for the bringing of classes to the Museum. Any teacher who thus brings a class for instruction is privileged to have the members of the class seated in the lecture room, and under the general supervision of the Curator to give Object Lessons or Demonstration Lessons to the members of the class, using the Museum Collections as a basis of illustration.

#### A NEW CHILDREN'S MUSEUM BUILDING

An appropriation made in 1911 by the city of New York of \$92,500 towards the cost of a new building for the Children's Museum. The Board of Estimates now has under consideration the appropriation of \$82,500 additional to make up a total of \$175,000 which the new building will cost.

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#### THE BOTANIC GARDEN AND ARBORETUM

Upon the recommendation of the Board of Trustees and Council of the Institute the Legislature of the State of New York passed, with the approval of the New York City administration in 1897, an Act known as Chapter 509 of the laws of 1897 which provides for the establishment of a Botanic Garden and Arboretum on Park lands south of the Institute Museum site and the Prospect Hill Reservoir.

The history of the movement to establish a Botanic Garden and Arboretum as contained during the period June, 1905, to June, 1911, is contained at the end of this Year Book.

In the autumn of 1909 the Committee on Botanic Garden and Arboretum renewed its request to the Board of Estimate and Apportionment that action be taken by the Board authorizing the Mayor of the City to execute a contract between the City and the Institute for the establishment

and maintenance of the Garden. Such action was taken by the unanimous vote of the Board on December 10th, and the contract was executed by the Mayor, on behalf of the Institute, on the 28th of December, 1909. The agreement provides for the carrying out of Chapter 618 of the laws of 1906. This Chapter is printed at the end of this Year Book.

In pursuance of the contract entered into and with the approval of the Hon. MICHAEL J. KENNEDY, Park Commissioner for the Boroughs of Brooklyn and Queens, a topographical survey map of the Botanic Garden and Arboretum was made during the months of March and April, 1910, and Mr. FREDERICK LAW OLMS TED, of the firm of OLMS TED BROTHERS, Landscape Architects, was engaged as a Landscape Architect to lay out the Botanic Garden lands as a Botanic Garden and Arboretum and as a proper approach to the Institute Museum Building. Prof. C. STUART GAGER, Ph.D., of the University of Missouri, was appointed in February as Director of the Botanic Garden and Arboretum, his services to commence on July 1, 1910, or as soon thereafter as practicable. Application was made on February 14th by the Park Commissioner for the Boroughs of Brooklyn and Queens, on the recommendation of the Institute to the Board of Estimate and Apportionment and to the Board of Aldermen of the City for the issue of corporate stock of the City to the amount of \$100,000, the proceeds of the sale of which may be used as follows: \$50,000 for the erection of plant houses in the Botanic Garden, and \$50,000 for the erection of a building containing rooms for instruction in Botany and for the administration of the Garden. Of these amounts the request made was that \$25,000 be provided for the greenhouses in 1910, and \$25,000 in 1911; also that \$25,000 be made available for the building containing rooms for instruction and administration in 1910, and \$25,000 in 1911.

On June 3, 1910, the Board of Estimate and Apportionment authorized the issue of corporate stock as requested for 1910, namely, \$25,000 for the construction of greenhouses, and \$25,000 for the building to contain rooms for instruction and administration. The Board of Aldermen confirmed and ratified this action of the Board of Estimate on June 24th.

Preliminary plans for the greenhouses and the building for instruction and administration have been prepared to be submitted to the city authorities in due course.

#### 1910-1911

During the season of 1910-1911 the Architects, Messrs. McKIM, MEAD & WHITE, prepared plans and specifications for the Instruction Building and the Plant Houses which were approved by the Art Commission of the City and accepted by the Board of Park Commissioners in April, 1911. The plans for the Garden as prepared by Messrs. OLMFSTED BROTHERS, Landscape Architects, were completed in December, 1910; were approved by the Landscape Architect of the Department of Parks, Mr. SAMUEL PARSONS, early in 1911, and accepted by the Park Commissioner of the Boroughs of Brooklyn and Queens, Hon. MICHAEL J. KENNEDY. The plan for the Garden includes an esplanade which will form a southern approach to the completed Museum Building. The Botanic Garden law of 1906 was amended by Chapter 178 of the laws of 1911. The amended laws gives authority to the City to change the boundary lines of the Botanic Garden so as to include portions of the Prospect Hill Reservoir not required for Reservoir purposes and to exclude the portion of the Garden required by the steps of the southern approach to the Museum. And the law further provides that the income of the Endowment Fund of the Botanic Garden may be expended

not only upon plants, trees and shrubs, but for other purposes in connection with the Garden.

The Hon. HENRY S. THOMPSON, Commissioner of Water Supply, Gas and Electricity, designated as no longer required for reservoir purposes, the portion of the Prospect Hill Reservoir lands comprising a strip of 270 feet wide on the eastern side of the Reservoir, and a strip of 20 feet wide on the southern side of the Reservoir, and forms of agreement as between the City of New York and the Institute, were prepared providing for the transfer of these lands on the recommendation of the Board of Park Commissioners by the Board of Estimate and Apportionment to the Botanic Garden area, such form of agreement to be an amendment to the existing agreement between the city and the Institute dated December 28, 1909; said agreement containing also provision for the use of the income from the Botanic Garden Endowment Fund for other purposes in connection with the Garden than the purchase of plants, trees and shrubs. The City of New York, acting by its Board of Estimate and Apportionment, turned over the Botanic Garden to the care and custody of the Institute on February 1, 1911. Work upon the Garden was begun in April and the Garden was opened to the public for the first time on May 13, 1911.

Those regularly employed in the establishment of the Garden in addition to Prof. C. STUART GAGER, Ph.D., Director, are Mr. NORMAN TAYLOR, Curator of Plants; H. A. CAPARN, Consulting Landscape Architect; J. V. BORIN, Head Gardner; H. KOLSH, Foreman Gardener; K. MASCLENSKI, Gardener; Miss BERTHA M. EVES, Secretary and Librarian, together with seven or eight day laborers.

Portions of the northwest part of the Garden were regarded and two new walks were constructed. A number of beds of plants illustrating the Botany of Long Island, were

planted in the northwest section of the Garden, and a number of other beds illustrating the systematic botany along the western side of the Garden.

The plans, specifications and estimates for the first section of the plant houses and of the heating plant were turned over to the Department of Parks on April 6th, and the same were made ready for advertising and public letting on June 28th, 1911.

#### 1911-1912

During the year 1911-12 the contract was awarded to the MANHATTAN CONSTRUCTION COMPANY for erecting the first section of the instruction or laboratory building of the BOTANIC GARDEN, the first section of the plant houses and for putting in a heating plant, for the sum of \$55,800. The work of construction was commenced on April 1st, 1912. The drawings and specifications for the central section of the plant houses were prepared by Messrs. McKIM, MEAD & WHITE, architects, and made ready for advertising and public letting by the Department of Parks of the city.

The city appropriated for the annual maintenance of the BOTANIC GARDEN AND ARBORETUM the sum of \$25,830, and during the spring and early summer of 1912 the grading of the southern portion of the central meadow of the Garden was under way, as well as the construction of the brook from the southeast portion of the Botanic Garden Lake through the central meadow to the southerly part of the Botanic Garden lands.

An amendment to the form of agreement for the establishment and maintenance of the BOTANIC GARDEN, as authorized by Chapter 178 of the laws of 1911, was prepared, approved by the Board of Trustees and by the Board of Park Commissioners of the city, and submitted to the Board of Estimate and Apportionment for its action. The amended form of agreement provides for the addition to

the Botanic Garden of two parcels of land heretofore known as Prospect Heights Reservoir land. These two parcels comprise the lands lying between the Prospect Heights reservoir and the site of the Central Museum of the Institute and a strip 20 feet in width along the southerly side of the Prospect Heights Reservoir. The amendment to the form of agreement also provides that the income of the Botanic Garden Endowment Fund of \$50,000 may be used for any purpose that will be of benefit to the Garden instead of being limited as heretofore, for the purchase of plants, trees and shrubs.

The preliminary form of agreement, as between the City of New York, the Department of Parks and Messrs. OLSTED BROTHERS, landscape architects, for grading portions of the Botanic Garden lands, has been approved by the Trustees of the Institute and the Park Commissioner of the Borough of Brooklyn.

#### THE ASTRONOMICAL OBSERVATORY

The original plans for the Museum Building included an Astronomical Observatory and Physical Laboratory to be located at the southeast corner of the Museum Building. Chapter 637 of the laws of 1906, authorized the removal of the observatory site from the point originally designated to a location west of the Museum site and south of the Prospect Hill Reservoir. Under the authority of this Act the Board of Estimate and Apportionment on June 24, 1909, approved of the change of site of the Observatory as authorized. A copy of Chapter 637 of the laws of 1900 may be found at the end of this Year Book.

The new site is on a level with the base line of the Institute Museum; is 150 feet east and west and 70 feet north and south. The architects, Messrs. McKIM, MEAD & WHITE, in fulfillment of their contract with the City of New York as represented by the Department of Parks,

Boroughs of Brooklyn and Queens, completed the plans and design for the Astronomical Observatory in November, 1909, and the same have been approved by the Board of Trustees of the Institute and accepted by the Department of Parks on behalf of the city.

A statement of the actions taken, looking towards the establishment of a permanent Observatory during the period from June, 1905, to June, 1909, is given under the Department of Astronomy.

There has been an increased interest in the temporary Observatory which has been in use by members of the Institute on twenty-two evenings during the past season, the attendance having been five hundred and eighty-eight. If it were practicable to have the temporary Observatory open every clear night, the attendance would be many thousands in a year.

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#### SUBSCRIBERS TO THE MUSEUM COLLECTION FUND OF 1912.

CONTRIBUTIONS CREDITED YEAR Book No. 24.....	\$7,720.00
JOHN W. JAMES .....	\$10.00
JOHN R. PLANTEN .....	100.00
Mrs. J. CROWELL (second subscription).....	6.00
Mrs. M. B. NUTTING .....	1.00
Col. ROBERT B. WOODWARD .....	99.91
HERMAN STUTZER .....	278.85
SPECIAL MUSEUM COLLECTION (1912):	
FUND No. 2 (ANONYMOUS) .....	1,000.00
	_____
	1,495.76
TOTAL .....	\$9,215.76

SUBSCRIBERS TO THE MUSEUM COLLECTION  
FUND OF 1913.

Miss ANNIE G. ATKINS .....	\$2.00
Miss CAROLINE D. BARR .....	50.00
OTTO WALTER BECK .....	3.00
E. LEGRAND BEERS .....	150.00
E. LEGRAND BEERS .....	100.00
JAMES D. BELL .....	10.00
J. V. V. BOORAEM .....	25.00
WILLIS BOUGHTON .....	2.00
MELVIN BROWN .....	5.00
Miss EVA F. BUKER .....	5.00
JOHN F. BUKER .....	25.00
Miss J. ERNESTINE CAPPELLE .....	2.00
I. S. COFFIN .....	20.00
W. H. CRITTENDEN .....	25.00
Mrs. JEREMIAH CROWELL .....	25.00
RALPH L. CUTTER .....	100.00
D. K. DEBEIXEDON .....	25.00
Dr. H. B. DELATOUR .....	10.00
Mrs. THEODORE G. EGER .....	10.00
A. EILERS .....	50.00
THOMAS FLINT .....	10.00
Miss ELIZABETH W. FROTHINGHAM .....	150.00
JOHN W. FROTHINGHAM .....	150.00
PETER GEDDES .....	20.00
Miss BESSIE F. GOETSCHIUS .....	5.00
Miss THEODORA E. GRUPÉ .....	2.00
H. F. GUNNISON .....	5.00
STANSBURY HAGAR .....	5.00
Mrs. LENA V. HAPPEL .....	25.00
A. AUGUSTUS HEALY .....	500.00
GEORGE A. HEARN .....	250.00
WALTER C. HUMSTONE .....	25.00
JOHN W. JAMES, JR. ....	10.00
WILLIAM L. JAMES .....	10.00
FRANK S. JONES .....	500.00
MARTIN JOOST .....	100.00
WILLIAM J. KELLY .....	10.00
Victor KOECHL .....	6.00
Miss JULIA W. LATIMER .....	50.00

L. W. LAWRENCE .....	500.00
Mrs. J. LEHRENKRAUSS .....	5.00
WILLIAM S. LEMEN .....	5.00
WILLIAM G. LOW .....	50.00
WILLIAM W. LOW .....	5.00
Mrs. FRANK M. LUPTON .....	100.00
FRANK LYMAN .....	50.00
JOHN McCALLUM .....	5.00
ST. CLAIR McKELWAY .....	10.00
J. ADOLPH MOLLENHAUER .....	100.00
HORACE J. MORSE .....	25.00
FRANK C. MUNSON .....	10.00
GEORGE NOTMAN .....	25.00
HENRY F. NOYES .....	50.00
Mrs. C. T. PIERCE .....	2.00
GEORGE N. PRENTISS .....	25.00
GEORGE A. PRICE .....	10.00
Mrs. W. A. PUTNAM .....	25.00
DICK S. RAMSAY .....	25.00
Mrs. A. RITZ .....	5.00
Mrs. J. L. ROBERTS .....	10.00
THOMAS J. RYAN .....	10.00
CHARLES J. SCHLEGEL .....	5.00
BENJAMIN F. SEAVER .....	10.00
Mrs. H. K. SHELDON .....	200.00
Mrs. J. L. SLACK .....	5.00
ADELBERT J. SMITH .....	3.00
Miss S. ELIZABETH SMITH .....	1.00
Mrs. WM. D. SPALDING .....	25.00
W. A. STRATTON .....	1.00
HERMAN STUTZER .....	100.00
Miss LOUISA B. VAN NOSTRAND .....	25.00
JUDAH B. VOORHEES .....	20.00
A. J. WESTERMAYER .....	5.00
ALFRED T. WHITE .....	1,000.00
Miss FRANCES E. WHITE .....	500.00
Miss HARRIET H. WHITE .....	500.00
ROBERT B. WOODWARD .....	1,000.00
A FRIEND .....	2.00
 TOTAL .....	 \$6,956.00

MEMORANDUM SHOWING BRIEFLY ADDITIONS MADE  
WITH THE MUSEUM COLLECTION FUND

FUND OF 1911

Total Subscriptions .....	\$10,049.81
Balance of 1910 Fund.....	805.18
From Lawrence Fund.....	46.22

Total .....	\$10,901.21
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Collection of North American Birds (Mounted) \$3,000.00

The collection was appraised at \$6,000.00 although actual value was greater, from which was deducted \$3,000.00 as a gift to the Brooklyn Institute Museum by the owner, JOHN LEWIS CHILDS, of Floral Park, New York.

Ethnological collections purchased by Mr. STEWART CULIN, to wit: A large and valuable Osage collection from Oklahoma, Ethnological objects from Taos, New Mexico, an extensive collection of fine basketry, implements and games from the Yokut Indians, Tulare reservation, and large baskets from the Pomo Indians (California), four large carved house posts and set of pot-latch images from Vancouver, B. C., large collection of Fraser River baskets and Ethnological material .....

740.00

Ethnological subjects representing the Plains Indians, Beaded Blanket (Pueblo Buck-skin) from Taos, New Mexico, Bear-Claw Necklace, A War-Bonnet from Pawhuska, Oklahoma, etc., etc. .....

222.52

Transportation and other preliminary expenses on 4 Totem Poles and other relics of the West Coast Indians, purchased by Mr. STEWART CULIN in Victoria, B. C. ....

57.85

Entomological specimens: About 5,000 specimens of Lepidoptera and Coleoptera from Victoria, B. C., 157 specimens from Southern Pines, S. C., etc., etc. ....

386.14

Natural History Specimens: Manuals, Fishes, Birds, Minerals and a number of collections purchased at aggregate sum of.....	245.23
Collection of Twelve Water Color Paintings by Winslow Homer.....	6,000.00
Printing, Postage Stamps, envelopes, clerical work, etc., in connection with collections purchased .....	250.27
	<u>\$10,901.21</u>
	<b>FUND OF 1912</b>
Total Subscriptions .....	<b>\$9,215.76</b>

### ETHNOLOGY

A large collection of Ainu ethnological material; a large collection of Japanese costumes, including two complete ceremonial costumes; a collection of Japanese Musical instruments and arms; collected by the Museum Expedition in Japan.....	\$2,202.03
Nine Chinese ceremonial robes.....	475.00
Two Chinese daggers, a bell from the Temple of Agriculture, Pekin, China, and one gold embossed helmet of a Manchu prince; two prehistoric stone objects used in the Indian games from the Tule River Reservation...	467.88
Navajo blanket, Maidu, Indian collection, Russian brass amulets, etc.....	278.85
	<u>\$3,423.76</u>

### FINE ARTS.

The R. A. Leckie collection of English glass, purchased at a cost of \$12,600, and on account of which \$7,500.00 has been raised by voluntary subscription apart from the collection fund .....	\$5,108.82
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This collection comprises about nine hundred specimens of drinking vessels and curious examples of the glass maker's art of the 17th, 18th and early 19th centuries in England. Many of the pieces bear inscriptions and designs alluding to the historical events of their periods. It is a very

beautiful and varied collection, the most complete of its kind existing in the world.  
 Printing, postage, envelopes, clerical work, etc., in connection with securing the fund..... 370.25  
 \_\_\_\_\_ \$5,479.07  
 \_\_\_\_\_ \$8,623.98

### NATURAL HISTORY

A Dugong skeleton, mounted (full-grown male), of a species from the Ganges and Euphrates, resembling a sea-cow or manatee. A very fortunate purchase, as full-grown specimens in perfect condition are becoming exceedingly rare..... \$195.00  
 A collection of minerals comprising many rare specimens chosen to fill gaps in the systematic series of native minerals; a pair of marine toads (*Bufo Aqua*), wax casts on a base, representing the largest species of toad known and rarely seen in dry models. This is one of the cases where a dry model is far more representative of the animals themselves than those in alcoholic preparation, no matter how carefully made; two beetles (*Dinastes Hercules*), also of notably large size..... 117.93  
 \_\_\_\_\_ \$312.93  
 Total ..... \$9,215.76

## SPECIAL ENDOWMENT FUNDS OF THE INSTITUTE.

### THE AUGUSTUS GRAHAM FUNDS

(1) "I give and bequeath unto the Brooklyn Institute the sum of Five Thousand Dollars, to be invested in the interest of the same, to be applied to the purchase of apparatus, and to the establishment and support of a course of free lectures annually, upon mechanics, natural philosophy and science, for the youth of the City of Brooklyn.

(2) "Also the further sum of Five Thousand Dollars, to be invested as aforesaid, the income to be applied to the purchase of specimens of natural history, and in causing free lectures to be delivered upon the subject of Natural History, from time to time, and the benefit of the Natural History Department of the Brooklyn Institute; and any surplus of said income to be applied to the general objects of said Institute.

(3) "Also the sum of Five Thousand Dollars, to be invested as aforesaid, and to apply the income thereof as follows: One-half toward the support of the School of Design, and the other half annually to a specimen of the Fine Arts, to be executed by a native artist, and kept in said Institute for the purpose of forming a gallery of Fine Arts.

(4) "Also the sum of Twelve Thousand Dollars, to be invested as aforesaid, the income to be applied to the delivery of Sunday Evening Lectures at such time as may be deemed advisable by the Directors or Trustees on the 'The Power, Wisdom and Goodness of God, as Manifested in His Works.'"

### THE JOHN B. WOODWARD MEMORIAL FUND

"I hereby give and grant unto the Brooklyn Institute of Arts and Sciences the sum of Twenty-five Thousand Dollars in memory of my brother, JOHN B. WOODWARD, to be

by it held as a separate fund, apart from all other funds of the Institute, to be securely invested and reinvested by its officers under the advice and direction of its Board of Trustees, the entire income of which is to be devoted to the encouragement of American Art, by the purchase, from time to time, of oil paintings of artists practicing their profession in the United States of America, preference being given to paintings exhibited in some regular exhibition of the work of artists, such as the National Academy of Design, the Society of American Artists, the Academy of Fine Arts in Philadelphia, or other similar exhibitions throughout the country; the selection and purchases to be made by the President and the Art Committee of the Institute with the approval of the Board of Trustees or of its Executive Committee."—Extract from Deed of Gift by Col. ROBERT B. WOODWARD.

#### THE ELLA C. WOODWARD MEMORIAL FUND

"And I hereby give and grant unto the Brooklyn Institute of Arts and Sciences the further like sum of Twenty-five Thousand Dollars, in memory of my wife, ELLA C. WOODWARD, to be by it held and invested in like manner, and the entire income devoted to the purchase from time to time of objects of art, virtu or antiquity, the selection and purchases to be made by the President and the Art Committee of the Institute, with the approval of the Board of Trustees or of its Executive Committee."—Extract from Deed of Gift by Col. ROBERT B. WOODWARD.

NOTE.—The two funds created by Colonel WOODWARD are together known as the WOODWARD MEMORIAL FUNDS.

#### THE FREDERICK LOESER FUND

Mr. FREDERICK LOESER, of Stuttgart, Germany, donated in 1902 the sum of \$10,000 as a Trust Fund, to the Brooklyn Institute of Arts and Sciences, the interest to be used for the purchase of photographs and casts of famous works

of Art (Paintings, Sculptures and Architecture, from originals in various museums, private collections in cities of Europe and America. In case at some future time the Museum should be adequately supplied with these, said interest may be used in the purchase of original works of Art, such as paintings, porcelains, bibelots, antiques, etc.

#### THE HARRY K. SHELDON FUND

Extract from the provisions of the will of HENRY K. SHELDON:

"And I give and bequeath to the Brooklyn Institute of Arts and Sciences in the City of Brooklyn, the sum of Ten Thousand Dollars (\$10,000) in trust, the income arising therefrom to be used by the said Institute towards paying any expenses the said Institute may incur for the Brooklyn Philharmonic Society, and for giving Chamber Music Concerts, which are to be given for the culture of music, and in rendering the highest standard of music which will be educational. Should, however, the Brooklyn Philharmonic Society be dissolved, or the Chamber of Music Concerts be discontinued, then the said bequest of Ten Thousand Dollars (\$10,000) shall revert to and form part of my estate."

#### THE CAROLINE H. POLHEMUS FUND

Mrs. CAROLINE H. POLHEMUS bequeathed to the Institute the sum of Ten Thousand Dollars to be held in trust, the income arising therefrom to be expended in the care, preservation and increase of the CAROLINE H. POLHEMUS COLLECTION OF PAINTINGS and other works of art also bequeathed by her to the Institute for its Museum collections in the Fine Arts.

#### THE FRANK SHERMAN BENSON FUND

Miss MARY BENSON presented to the Institute in 1909 the sum of \$11,013.62 received by her through the sale of a Collection of Greek Coins made by FRANK SHERMAN BEN-

SON. In pursuance of the expressed wish of Miss BENSON the Trustees voted to establish the FRANK SHERMAN BENSON FUND, the income from this Fund of \$11,013.62 to be used in enriching the Institute Museum Collections.

#### THE CHARLES STEWART SMITH MEMORIAL FUND

To perpetuate the memory of a very dear and almost lifelong friend, the late CHARLES STEWART SMITH, a former President of the New York Chamber of Commerce, and a man who did many good deeds for the betterment of his fellowmen, and who during a long life encouraged the arts and sciences in a large degree, the sum of Fifteen Thousand Dollars is presented by two friends of Mr. SMITH for an endowment fund to be known as THE CHARLES STEWART SMITH MEMORIAL FUND. This fund is held in trust, the income to be used in purchasing works of art for the Institute Museum, and each work so purchased shall be marked as coming from said fund. The income of the fund is not to be allowed to accumulate for more than two years at any one time.

#### THE ABRAHAM ABRAHAM FUND

Mr. ABRAHAM ABRAHAM bequeathed to the Institute the sum of \$10,000, the income of which is to be used annually for the benefit of the Institute. This income will be devoted to providing courses of lectures on the Fine Arts, similar to the courses that were provided by Mr. ABRAHAM during his life time.

#### THE BATTERMAN ART FUND

Mr. HENRY BATTERMAN bequeathed to the Institute the sum of \$20,000, the income of which is to be expended in making additions to the Art Collections in the Institute Museum, and the fund is to be known as the HENRY BATTERMAN ART FUND.

CONDENSED SUMMARY FROM THE REPORT OF THE  
TREASURER.

FOR THE YEAR ENDING MAY 1, 1913.

May 1, 1912—Cash on hand, in banks..... \$16,922.97

RECEIPTS.

May 1, 1912, to May 1, 1913.

*Institute Associate Funds Account—*

Including accounts received for Annual  
Dues from Associate Members; from  
Pedagogical and other classes; special  
illustrated and other Lectures; Dramatic  
Readings; Philharmonic, Oratorio and  
other Concerts, etc., etc..... \$127,014.07

*Biological Laboratory*

at Cold Spring Harbor, L. I.—

Special contributions, tuitions, etc..... 1,935.00

*General Funds Accounts—*

Including Initiation Fees of new mem-  
bers, Life Membership Fees, etc..... 2,773.25

*Investment Funds Account—*

Including (mainly) payments on account  
of mortgages due and passed through  
this account for reinvestment..... 32,750.00

*Endowment Fund,—Income Account—*

Interest on Investments..... 21,867.53

*Museums Account—*

For Maintenance of Museums..... 110,122.91

*Museum Collections Fund—*

Contributions during the year to special  
fund for the purchase of exhibits in Art  
and Sciences for the Museums..... 9,530.91

*Museum Fund temporary loan account.....*

12,000.00

317,993.67

Amount carried forward ..... \$334,916.64

Amount brought forward ..... \$334,916.64

## SPECIAL FUNDS.

*Woodward Memorial Funds—*

Principal amount \$50,000.	
Income received .....	\$2,535.37

*Frederick Loeser Art Fund—*

Principal amount \$10,000.	
Income received .....	500.00

*Henry K. Sheldon Fund—*

Principal amount \$9,500.	
Income received .....	475.00

*Graham Funds—*

(1) Library, etc.	
Principal amount \$20,000.	
Income received .....	1,000.00

(2) Mechanics, etc.	
Principal amount \$5,000.	
Income received .....	250.00

(3) Classes in Design.	
Principal amount \$5,000.	
Income received .....	250.00

(4) Natural History, etc.	
Principal amount \$5,000.	
Income received .....	250.00

(5) Sunday Evening Lectures, etc.	
Principal amount \$12,000.	
Income received .....	600.00

*Cary Library Fund—*

Principal amount \$10,000.	
Income received .....	500.99

*Women's Law Lecture Fund—*

Principal amount \$1,100.	
Income received .....	55.00

*Eastern District Library Fund—*

Principal amount \$3,894.73.	
Income received .....	194.72

*Polhemus Fund—*

Principal amount \$10,000.	
Income received .....	500.00

*Frank Sherman Benson Fund—*

Principal amount \$11,013.62.

Income received ..... \$550.68

*Botanic Garden and Arboretum Fund—*

Principal amount \$50,000.

Income received ..... 2,500.00

*Temple Prime Fund—*

Principal amount \$2,500.

Income received ..... 125.00

*Gen. J. B. Woodward Statue Fund—*

\$5,536.01.

Income received ..... 19.89

*Freida M. Brunn Fund—*

Principal amount \$5,000.

Income received ..... 250.00

*Smith Memorial Fund*

Principal amount \$15,000.

Income received ..... 750.00

*Brackett Library Fund—*

Principal amount \$500.

Income received ..... 6.25

*Henry Batterman Fund—*

Principal amount \$20,000.

Income received ..... 1,000.00

*Abraham Abraham Fund—*

Principal amount \$10,000.

Income received ..... 500.00

*Museum Special Fund* ..... 2,287.61*Botanic Garden and Arboretum Fund—Loan**Account* ..... 3,500.00*E. C. Woodward Memorial Fund—Inc.—**Loan Account* ..... 1,200.00

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\$20,300.51

<i>Botanic Gardens and Arboretum Maintenance</i> .....	\$24,825.40
<i>Innes Painting and O. E. Glass Fund</i> .....	12,290.00
<i>American Institute of Architects, Brooklyn Chapter</i> .....	100.00
<i>Museum Reception Fund</i> .....	880.00
<i>Museum Surplus Fund</i> .....	10.00
<i>Botanic Garden Sustaining Membership Fund</i> .....	5.00
<i>Special Museum Collection (1912) Fund—No. 1</i> .....	675.00
<i>Special Museum Collection (1912) Fund—No. 2</i> .....	13,608.82
<i>Bills Payable</i> .....	25,000.00
<i>Endowment Fund</i> .....	2,953.42
 <i>Grand total for the fiscal year, including cash on hand (\$16,922.97)</i> .....	\$435,564.79

## DISBURSEMENTS.

*May 1, 1912, to May 1, 1913.**Associate Funds Accounts—*

Covering payment for Lectures, Dramatic Readings, talent for Song Recitals, Chamber Music, Boston Symphony Orchestra and other Concerts, Instructors of Pedagogical Classes, and other salaries, sundry rents for reserved-seat events, printing, etc..... \$131,517.61

*Biological Laboratory*

at Cold Spring Harbor, L. I.—  
Including salaries of the corps of Instructors for the season 1909, for general supplies, care of Dormitories, etc... 2,004.07

*General Funds Accounts—*

Including payments for rents of lecture halls for members' weekly-ticket events, general office of management, rooms for pedagogical classes, Department of Photography, etc., management, salaries, etc. 9,668.95

*Investment Funds Account—*

Sundry investments and reinvestments in first mortgages on New York City real estate, etc..... 55,000.00

*General Endowment—Income Account.....*

13,343.90

*Museum Maintenance—*

Including salaries of Curators and their assistants, Taxidermists, Librarians, Stenographers, Attendants, Engineers and Mechanics, for coal and sundry supplies, etc., during the fiscal year..... \$110,122.91

*Botanic Garden Maintenance* ..... 24,825.40

*Museum Collections Fund—*

Payment for Works of Art, and Archæological, Ethnological and other specimens, etc. ..... 9,233.81

## SPECIAL FUNDS.

*Woodward Memorial Fund*—Income..... 1,700.00

*Loeser Art Fund*—Income..... 923.00

*Sheldon Music Fund*—Income..... 421.42

*Cary Library Fund*—Income..... 662.69

*Graham Fund—Income—*

(1) Library, etc., Fund..... \$731.09

(2) Mechanics Fund ..... 360.25

(4) Natural History Fund..... 605.78

(5) Sunday Evening Lec. Fund.. 675.00

\_\_\_\_\_ \$2,372.12

Amount carried forward ..... \$361,795.88

Amount brought forward ..... \$361,795.88

*E. D. Library Fund*..... 194.72

*Bills Payable* ..... 20,000.00

*Museum Fund*—Loan ..... 7,000.00

*Botanic Garden* —Loan ..... 4,500.00

*Special Museum Collection, 1912*—No. 1..... 675.00

*Special Museum Collection, 1912*—No. 2..... 13,608.82

*J. B. Woodward Statue Fund*..... 2,048.65

*Higgins Poem Fund* ..... 500.00

*Museum Special Fund* ..... 2,000.00

*Botanic Garden and Arboretum Fund*—Income..... 3,666.58

*Freida M. Brunn Fund*—Income..... 206.70

*Smith Memorial Fund*—Income ..... 1,050.00

*Museum Reception Fund* ..... 953.35

*Temple Prime Scholarship Fund*—Income..... 100.00

<i>Law Lectures Fund</i> —Income.....	\$60.00
<i>Abraham Abraham Fund</i> —Income .....	500.00
<i>Innes Painting and O. E. Glass Fund</i> —Income.....	10,540.00
<i>Polhemus Fund</i> —Income .....	700.00
<i>Frank Sherman Benson Fund</i> —Income.....	650.00
<i>Henry Batterman Fund</i> —Income.....	750.00
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<b>Total Disbursements for the fiscal year.....</b>	<b>\$431,589.70</b>
<b>May 1, 1913, cash on hand.....</b>	<b>3,975.09</b>
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<b>Grand Total .....</b>	<b>\$465,564.79</b>

### ENDOWMENT FUNDS.

MAY 1, 1913.

<i>Endowment for General Purposes.....</i>	<i>\$238,858.59</i>
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### SPECIAL TRUST FUNDS.

*Only the income to be used.*

*Augustus Graham Funds—*

For Free Library, etc.....	\$20,000.00
“ Apparatus and Lectures on Mechanics, Natural Science, etc.....	5,000.00
“ School of Design and Specimens of Fine Arts by Native Artists, etc....	5,000.00
“ Specimens and Lectures, Natural His- tory, etc. ....	5,000.00
“ Sunday Evening Lectures—“Power, Wisdom and Goodness of God as Manifested in His Works”.....	12,000.00

*William H. Cary Fund—*

For support of Library.....	10,000.00
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*Eastern District Library Association—*

For Annual Memberships, Scholars of Pub- lic Schools .....	3,894.73
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*Frederick Loeser Art Fund—*

For purchase of photographs and casts of famous works of art (paintings, sculp- tures and architecture) from originals in various museums or private collections in Europe and America .....	10,000.00
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*Henry K. Sheldon Fund—*

For Promotion of Philharmonic and  
Chamber Music Concerts ..... \$9,500.00

*Law Lectures for Women by Women..... 1,100.00*

*Polhemus Fund—*

For use in caring for and increasing the  
Polhemus collections of paintings..... 10,000.00

*John B. Woodward Memorial Fund—*

For the encouragement of American Art,  
purchase of oil paintings of artists prac-  
ticing their profession in the United  
States, preference being given to paint-  
ings exhibited in some regular exhibition  
of the work of artists..... 25,000.00

*Ella C. Woodward Memorial Fund—*

For the purchase of objects of art, virtu  
and antiquity ..... 25,000.00

*Frank Sherman Benson Fund..... 11,013.62*

*Botanic Garden and Arboretum Fund..... 50,000.00*

*Freda Brunn Fund—*

For use in caring for and increasing the  
Julius W. Brunn Shell Collection..... 5,000.00

*Temple Prime Fund ..... 2,500.00*

*Chas. Stewart Smith Memorial Fund—*

For purchasing Works of Art..... 15,000.00

*Abraham Abraham Fund—*

For giving courses of Lectures on Art.... 10,000.00

*Batterman Fund—*

For the purchase of Works of Art..... 20,000.00

*Brackett Library Fund—*

For the purchase of books for the Botanic  
Garden Library ..... 500.00

————— \$494,365.94

## ACCESSIONS TO THE CENTRAL MUSEUM

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### DEPARTMENT OF FINE ARTS PAINTINGS (GIFTS)

**ABRAHAM**, Mrs. A., 800 St. Marks Avenue, Brooklyn, N. Y.,  
Oil painting, "Head of an Indian," by H. Raschen.

**ATWATER, RICHARD MEAD**, 149 West 35th Street, Manhattan,  
Oil painting, "La Route de Quettehout," by Ogden Wood.

**COFFIN**, W. A., Jennerstown, Pa.,  
Oil painting, "A thunder-storm," by the Artist.

**EVANS**, WILLIAM T., Montclair, N. J.,  
A collection of 20 paintings (19 pastels, 1 oil painting), representing the Life and Death of Christ, by Otto Walter Beck.

**HEALY**, A. AUGUSTUS, 198 Columbia Heights, Brooklyn, N. Y.,  
Oil painting, Venetian School about 1530, The Adoration of the Magi, by Sebastiano Florigerio.

**HERTER**, ALBERT, 841 Madison Avenue, New York City,  
Oil painting, "The Hour of Despondency," by the Artist.

**PRATT**, GEORGE D., 245 Clinton Avenue, Brooklyn, N. Y.,  
Oil painting, Landscape, by Julian Rix.

**PUTNAM**, WILLIAM A., 70 Willow Street, Brooklyn, N. Y.,  
Oil painting, "Every Saturday," by Arthur B. Davies.

SCHIEREN, Hon. CHARLES A., 405 Clinton Avenue, Brooklyn, N. Y.,

Oil paintings:

Landscape, by Frank DeHaven;

Venice at Sunset, by George H. Bogert;

"Portrait of George Harley," by G. Clint;

28 oil paintings purchased at the sale of the late H. T. Chapman collection:

Marine, by A. Boulard;

Naval Battle, by Van Mascheren;

Study of a Lion, by J. L. A. Géricault;

T. B. Guest's Farm House, by R. A. Blakelock;

The Open Book, by W. Babcock;

Italian Girl, by J. B. C. Corot;

Pigs, by George Morland;

Landscape Seen Through Ruins, by P. Pannini;

The Wreck, by C. J. Vernet;

Head of Wild Boar, by Unknown Painter;

Naval Battle, by Van Mascheren;

Portrait of Fanny Kemble Butler, by H. Inman;

School Time in Orient, by A. G. Decamps;

Allegorical Subject, by T. Couture;

Still Life, by A. Vollon;

Street Scene, by E. Isabey;

Autumn Landscape, by A. B. Davies;

Porch of Roman Palace, by O. Viviani;

Coast Scene with Boats, by A. Vollon;

Naval Battle, by Van Mascheren;

A Garden Fête, by S. Fraencken;

Effect of an Earthquake, by E. Isabey;

The Siesta, by Honoré Daumier;

The Place of the Mothers, by A. B. Davies;

Picnic in the Catskills, by H. Inman;

Portrait of Artist's Mother, by J. L. A. Géricault;

Children of Yesteryear, by A. B. Davies;

Storm on the Coast, by C. J. Vernet.

SMITH, THEODORE E. (for the Estate of BENJ. H. SMITH),  
Brooklyn, N. Y.,

Oil painting, "Sheep," by Anton Braith.

VAN ELTEN, Mrs., and PLANTEN, JOHN R., Brooklyn, N. Y.,  
Oil painting, Landscape, by H. D. Kruseman Van  
Elten.

PAINTINGS (PURCHASE)

CHARLES STEWART SMITH FUND,

Oil painting, "October Morning," by W. A. Coffin;

Oil painting, "Ca d'oro," by R. F. Blum.

FREDERICK LOESER ART FUND,

Oil painting, "Evening Glow, the Old Red Cow," by  
A. P. Ryder.

POLHEMUS FUND,

Oil painting, "Meadow Flowers," by J. H. Twacht-  
mann.

JOHN B. WOODWARD MEMORIAL FUND,

Oil painting by Miss E. C. Bannister;

"Portrait of George C. Brackett";

Oil painting, "Fish," by William M. Chase.

SPECIAL SUBSCRIPTION, 1913,

Oil painting, "On the Delaware River," by George  
Innes.

SPECIAL MUSEUM FUND,

Oil Painting, "Sunset, Cattle by the Pool," by  
Theophile De Bock.

PAINTINGS (LOANS)

ARNOLD, W. H.,

3 water colors and 1 oil painting by Winslow Homer.

CARY, Mrs. JULIAN M., 33 West 51st Street, New York  
City,

4 oil paintings:

The Bay of Naples, by A. Vertunni;

Gate of Cordova, by Alexander Wagner;

Silver Poplars, by Joseph Van Luppen;

Refuge from Sins, by L. Nono.  
 "The Lost Pleiad," by William Bouguereau.  
 CURTIS, SIDNEY, 106 Hicks Street, Brooklyn, N. Y.,  
 2 water colors by Winslow Homer.  
 Dow, Mrs. ABBOTT LOW, Wakefield, N. H.,  
 3 oil paintings:  
 Madonna and Child, by Sassoferato;  
 The Skittle Players, by Jan Steen;  
 View of Lake George, by S. R. Gifford.  
 HODGKIN, C.,  
 16 colored drawing by Francesco Bartolozzi.  
 LEHMAIER, LOUIS A., 78 Beekman Street, New York City,  
 25 paintings by various American artists.  
 PRATT, HERBERT L., 245 Clinton Avenue, Brooklyn, N. Y.,  
 Oil painting, "Sortie from Gibraltar," by John  
 Trumbull.  
 SCHIEREN, Hon. CHARLES A., 405 Clinton Avenue, Brooklyn, N. Y.,  
 19 oil paintings, American and European.  
 SHEPHERD, JAMES G., Scranton, Pa.,  
 52 paintings, American and European, by various  
 artists.

#### BLACK AND WHITE (GIFTS)

LEARNED, A. G., 12 West 40th Street, New York City,  
 3 etchings by A. G. Learned: Street Scene in Havana; Sibyl; E. A. Poe.  
 PUTNAM, WILLIAM A., 70 Willow Street, Brooklyn, N. Y.,  
 Set of 23 lithographs of the Panama Canal by  
 Joseph Pennell.  
 SULLIVAN, GEORGE H., 16 West 11th Street, New York  
 City,  
 9 photographs (7 carbon prints by Braun and 2 large  
 German black and white reproductions of paintings).

## SCULPTURE (GIFTS)

**BACON, EXECUTORS OF ESTATE OF FRANCIS MCNEIL,**  
 Marble bust of Washington Irving, unknown artist.

**PRATT, GEORGE D., 245 Clinton Avenue, Brooklyn, N. Y.,**  
 Bronze by A. Phimister Proctor, "Young Faun";  
 Bronze moose by A. P. Proctor.

**VONNOH, BESSIE POTTER, 33 West 67th Street, New York City,**

1 bronze, "A Modern Madonna."

**WOODWARD, Col. ROBERT B., 118 Pierrepont Street, Brooklyn, N. Y.,**

Bi-frontal marble bust of Zeus and Hera, found at Wakos in the Greek Archipelago. Date, first century, B. C.

## SCULPTURE (LOAN)

**VONNOH, BESSIE POTTER, 33 West 67th Street, New York City,**

46 pieces of bronze, terra cotta and plaster.

## SCULPTURE (PURCHASE)

**JOHN B. WOODWARD MEMORIAL FUND,**  
 1 white marble lion by A. P. Proctor.

**MUSEUM SPECIAL FUND,**

6 bronzes: A Young Mother; Girl Dancing; His First Journey; A Sketch; Enthroned; The Dance, and

6 terra cottas: Repose; The Fan; Memories; Sketch (seated figure); Sketch (girl with hat); Sketch (morning gown), by Bessie Potter Vonnoh.

## ART OBJECTS (GIFT)

**AVERY, SAMUEL P., 61 Woodland Street, Hartford, Conn.,**  
 78 silver and bronze medals and 1 plaque.

BENEDICT, Miss LYDIA, 296 Washington Avenue, Brooklyn, N. Y.,  
 7 bronze medals.

DRIGGS, Miss ALICE A., 279 Washington Avenue, Brooklyn, N. Y.,  
 Old lace shawl.

EGYPT EXPLORATION FUND,  
 83 Egyptian pieces from temple and grave excavations.

ESTERBROOK, EDWARD B., 182 Montague Street, Brooklyn, N. Y.,  
 Staffordshire pitcher.

INDJOUJIAN BROTHERS, New York City,  
 2 specimens of Persian majolica.

PELL, Rev. ALFRED DUANE, 929 Fifth Avenue, New York City,  
 148 pieces of English, French and German porcelains,  
 and 1 Chinese ivory box.

PRATT, Mrs. GEORGE D., 245 Clinton Avenue, Brooklyn, N. Y.,  
 4 small Staffordshire pieces—1 dish and 3 plates.

PRATT, GEORGE D., 245 Clinton Avenue, Brooklyn, N. Y.,  
 2 German antique stained glass panels and 1 framed drawing by John LaFarge.

SCHIEREN, Hon. CHARLES A., 405 Clinton Avenue, Brooklyn, N. Y.,  
 Antique Swiss stained glass window, 16th century.

WOODWARD, Col. ROBERT B., 118 Pierrepont Street, Brooklyn, N. Y.,  
 11 specimens of Persian majolica;  
 180 pieces of Greco-Roman glass and stones;  
 A drinking horn in engraved glass, silver, metal,  
 semi-precious stones and enamels;  
 7 bronze medals from the "Circle of Friends of the Medallion."

## ART OBJECTS (LOAN)

Dow, Mrs. ABBOT Low, Wakefield, N. H.,  
 Capo di Monte group of wrestlers;  
 A pair of Dresden vases.

PELL, Rev. ALFRED DUANE, 929 Fifth Avenue, New York  
 City,  
 28 pieces of English, French and German porcelain  
 and 4 pieces of old Sheffield plate.

## ART OBJECTS (PURCHASE)

FRANK SHERMAN BENSON FUND,  
 39 pieces of Staffordshire groups and figures.

SPECIAL SUBSCRIPTION,  
 874 pieces of English table glass, 16th, 17th, and 18th  
 century.

HENRY BATTERMAN FUND AND SPECIAL SUBSCRIPTION  
 FUND,  
 11 mediæval and stained glass panels.

DEPARTMENT OF ETHNOLOGY  
 GIFTS

ALLEN, GEORGE H. N., 87 North Oxford Street, Brooklyn,  
 N. Y.,  
 A bow and 3 arrows.

BAIKO, ONOYI, Imperial Theatre, Tokyo, Japan,  
 A valuable theatrical wig.

BEHR, EDWARD A., 605 Third Street, Brooklyn, N. Y.,  
 Japanese lacquered box and porcelain incense burner,  
 and Siamese porcelain bowl with cover.

BENEDICT, Miss LYDIA, 296 Washington Avenue, Brooklyn,  
 N. Y.,  
 Basket from California Indians; 2 carved wooden  
 spoons and basket, Alaska Indians; Mexican purse  
 and Chinese jade bracelet.

DE SOLA, Mme. CANDELARIA,  
 Chinese embroidered silk shawl.

DICKINSON, Dr. ROBERT L., 168 Clinton Street, Brooklyn, N. Y.,

Jinriksha,

Bolo (knife in sheath), Philippine Islands;

2 Korean pipes (one with tobacco bag); 2 Chinese hats; Japanese wooden dipper; cake of Chinese ink; lacquered stand; 3 bronze door handles; hat and Indian rattle.

FARRAR, HOTIO W., FOR ESTATE OF H. C. FARRAR,

Indian implements, etc., from Swanton, Vermont and Victoria, B. C., 1870 and '80's.

FRANCISCAN FATHERS,

Navajo Indian cradle.

HORI, Mr. N., Shimo Gamo Temple, Kyoto, Japan,

An embroidered temple curtain.

HUDSON, Dr. J. W., Ukiah, Cal.,

Carved stone fetish (ball) from Clear Lake, Cal.

MEDD, Mrs. CHARLES F.,

Collection of Chinese and Japanese coins.

MOORE, RUFUS E., 38 Union Square, Manhattan,

Japanese priest's drum, 4 spears, conch shell trumpet, 2 Chinese wooden signs and 2 brass objects of unknown use.

MUNRO, ROBERT P., Atago Yama, Kofu, Japan,

A pair of Japanese skates.

POLK, Mr. JACK,

Cathnite pipe with stem, 2 arrows, pair leggings, awl case, 2 pouches and bowl bead breast plate.

PUTNAM, Mrs. WILLIAM A., 70 Willow Street, Brooklyn, N. Y.,

Large Japanese kakemono, death of Buddha; 2 carved boxes, 2 horn spoons and 2 wooden spoons from N. W. coast; carved totemic objects, and scourge from South America.

**SHELDON, HENRY K.,**

Decorated pottery jars, stone vessels and Spanish stirrups.

**STEVENS, Mr. SHEPHERD, 135 Madison Avenue, Manhattan,**  
Buddhistic image of carved wood,—Mondju seated on a lion.

**STUTZER, HERMAN, 815 St. Marks Avenue, Brooklyn, N. Y.,**  
A large collection of Ainu garments, utensils and weapons, being all the Ainu specimens purchased on the Museum Expedition of 1912;  
Model of Japanese pillow (Children's Museum).

**VRROMAN, A. C.,**

Wooden image of Zuni Indian war god from ancient shrine on Thunder Mountain.

**WHITE, Mrs. A. T.,**

A Greek woman's costume, modern.

#### LOAN

**CHANALEE, JR., 83 Washington Place, New York City,**

8 Japanese "No dance" kimono and kakemono (picture) with representation of the "No."

#### PURCHASES

2 Japanese imperial court costumes, complete, with fans, and 1 with crown in box;

A collection of Japanese women's costumes;

A collection of Japanese maps and color prints illustrating native customs;

Flemish wood carvings of the entombment and brass reliquary;

A collection of Japanese arms, musical instruments, games and household objects;

Museum Expedition to Japan, crown in lacquered box (Ainu specimens);

Chinese military court costume (*Metropolitan Art Association*);

1 suit Japanese armor.

## MUSEUM COLLECTION FUND,

2 carved wooden panels, with lions, Japanese; inlaid iron fragment helmet; inlaid backgammon board.

## DEPARTMENT OF NATURAL SCIENCE

## MAMMALS (GIFTS)

AHRENS, Mr. WILLIAM,  
Woodchuck, living.

DALE, Mrs. J. M., 60 South Elliott Place, Brooklyn, N. Y.,  
Horns, African water buck.

ENGELHARDT, GEORGE P., Brooklyn, N. Y.,  
Deer mouse (Children's Museum).

NEW YORK ZOÖLOGICAL SOCIETY, New York City,  
Dolphin, in the flesh;  
Elephant seal, juvenile;  
Chimpanzee, adult;  
Two-toed sloth;  
Red fox;  
2 racoons;  
Civet cat;  
Lemur;  
Barbary sheep;  
Monkey;  
Puma, in flesh;  
Grant's zebra.

PRATT Mr. GEORGE D. (through JAMES CLARK),  
Horns, from Sinai Peninsula.

## PURCHASE

GRAHAM NATURAL HISTORY FUND (KNY-SCHEERER Co.),  
5 mammal skins.

SAUTER, Mr. FRED, New York City,  
Skin of sea lion, raw.

MUSEUM EXPEDITION TO YAPHANK, L. I. (GEORGE P. EN-GELHARDT),

3 bats: 1 silver bat, 2 brown bats.

MUSEUM EXPEDITION TO CRANBERRY LAKE, ADIRONDACKS, N. Y. (R. H. ROCKWELL),

Virginia deer. Large buck, 1 doe, 2 spike-horn bucks, 1 fawn.

MUSEUM EXPEDITION TO WYANDOTTE AND OTHER CAVES, INDIANA (R. H. ROCKWELL),  
182 animals.

BIRDS (GIFTS)

ANDERSON, ALEXANDER (Children's Museum),  
English sparrow (in the flesh).

BOGUE, HARRIET E.,  
European bullfinch (in the flesh).

HELME, ARTHUR H.,  
2 whistling swans, from Lynnhaven Va. (in the flesh).

JACKSON, THOMAS H., West Chester, Pa.,  
Nest and eggs, worm-eating warbler.

JANVIER, Miss SALLIE,  
Bald eagle (juvenile).

LUND, JESSE,  
Parula warbler.

McCULLOUGH, SYLVESTER,  
English sparrow (in the flesh) (Children's Museum).

NEW YORK ZOOLOGICAL SOCIETY, New York City,  
Zoölogical Park:

Harpy eagle.

PEAVEY, ROBERT W., 791 Coney Island Avenue, Brooklyn, N. Y.,

4 marsh harriers;  
1 full-sized nest of same;  
2 solitary sandpipers;  
3 lesser yellow legs.

RHODES, GEORGE A., 935 New York Avenue, Brooklyn,  
N. Y.,  
3 birds: 2 Wilson snipe, 1 meadow lark.

REPTILES (GIFTS)

BECK, SAMUEL, New York City,  
2 alligators, living.

DAVIS, WILLIAM T.,  
Pine-snake (living) and snake-necked turtle.

HEALY, A. AUGUSTUS, 198 Columbia Heights, Brooklyn,  
N. Y.,  
Frog: de-pigmented *in toto* (in fluid).

NEW YORK ZOOLOGICAL SOCIETY, New York City,  
Aquarium:

Loggerhead turtle, in the flesh.

Zoölogical Park:

Anaconda, in the flesh;

South American boa-constrictor (half-grown).

PURCHASE

GRAHAM NATURAL HISTORY FUND,  
Chain snake from Florida.

FISHES (GIFTS)

NEW YORK ZOOLOGICAL SOCIETY, New York City,  
Aquarium:  
Jewfish.

INSECTS (GIFTS)

BARNES, Dr. WILLIAM, Decatur, Ill.,  
220 coleoptera of different orders.

ENGELHARDT, GEORGE P., Brooklyn, N. Y.,  
Numerous insects of all orders from Florida and  
Guatemala.

HAIGHT, D. H. (through Mr. G. FRANK),  
38 insects.

KAIser, JUSTUS, Woodhaven, L. I.,  
14 lepidoptera.

LEEDS, Mr. JAMES S., Brooklyn, N. Y.,  
Nest of trap-door spider, from Phoenix, Ariz.

MEITZEN, JULIUS,  
30 specimens (coleoptera).

PEARSALL, RICHARD F., Brooklyn, N. Y.,  
12 insects of different orders;  
43 moths (Geometridæ).

UNITED STATES NATIONAL MUSEUM, Washington, D. C.,  
54 specimens (23 species) coleoptera.

#### INSECTS (PURCHASE)

GRAHAM NATURAL HISTORY FUND,

249 insects of different orders from California;  
100 insects of different orders from Sonoma County,  
Cal.;  
8 diptera and nemoptera.

#### EXCHANGE

AMERICAN ENTOMOLOGICAL COMPANY, Brooklyn, N. Y.,  
96 coleoptera;  
95 insects.

DE LA TORRE BUENO, J. R., White Plains, N. Y.,  
10 specimens (hemiptera and coleoptera).

LODING, R. P., Mobile, Ala.,  
45 insects (hemiptera-heteroptera);  
40 insects.

NICOLAY, ALLAN, Brooklyn, N. Y.,  
110 insects (hemiptera).

## COLLECTION

1,737 specimens, Long Island only;  
 256 specimens lepidoptera, Long Island;  
 348 specimens lepidoptera, New Jersey;  
 Insects (and 1 nest of a species of *Odynerus*).

## MOLLUSKS (GIFTS)

NORTHRUP, Mr. D.,

Sea fans.

PAULI, H. G., Flatbush, L. I.,

A string of the ovicapsules (egg cocoons) of the channelled whelk (*Sycotypus canaliculatus L.*), found on Brighton Beach, L. I.

WILLIAMS, Mrs. ANNA CRAVEN,

16 species of land shells from Jamaica, W. I., and 2 species of marine shells.

## PURCHASE

FREDA M. BRUNN FUND,

The "C. Dayton Gwyer" Collection of Shells, comprising about 2,200 species.

## COLLECTION

Several hundred mollusks and other invertebrates from Long Island;

7,000 invertebrates, Expedition to Newfoundland and Labrador.

## OTHER NON-VERTEBRATES (EXCHANGE)

AMERICAN MUSEUM OF NATURAL HISTORY,

35 crustacea, Albatross Expedition.

## PLANTS (GIFTS)

AMES, FRANK H., Brooklyn, N. Y.,

37 New York State fungi, mostly Long Island;  
 Tree fungus, Oyster Bay, N. Y. (*Fomes rimosus*);  
 Woody fungi, Long Island.

The "Byrologist" (through Mr. E. B. CHAMBERLAIN),  
 Rare moss from Norway;  
 Mosses from Norway and New Zealand.

DEPARTMENT OF PARKS (Mr. J. J. LEVISON), Brooklyn,  
 N. Y.,

4 pieces of tree trunk: white ash, red pine, golden  
 birch, white birch, 1 branch.

LEVISON, J. J., Brooklyn, N. Y.,  
 2 tree trunks (hackberry tree and red cedar).

FRANCE, Mrs. MELVILLE J., Brooklyn, N. Y.,  
 6 sea weeds from Santa Cruz, Cal.;  
 17 marine algæ from Santa Cruz, Cal.

HUBBARD, Miss, Brooklyn, N. Y.,  
 99 ferns, Hawaiian.

LUND, JESSE F., Brooklyn, N. Y.,  
 Fasciated branch of red maple from Flatlands, L. I.

RAPHANEL, Mrs.,  
 Woody fungi. Woody galls "from Mexico."

#### COLLECTION

300 plants, Expedition to Newfoundland and Labrador.  
 FOSSILS, ROCKS AND MINERALS (GIFTS)

AUSTEN, Mrs. PETER T., Brooklyn, N. Y.,  
 5 basalt sections from Giant's Causeway, Ireland (4  
 sections brought to this country in the '40's or  
 thereabouts);  
 "Gypsum flowers" (stalactite), Mammoth Cave.

BENEDICT, Miss LYDIA, 296 Washington Avenue, Brooklyn,  
 N. Y.,  
 2 small masses of calcite crystals.

BLUMENTHAL, Mr. M., Brooklyn, N. Y.,  
 Rough sapphires.

COMSTOCK, Mr. and Mrs. PHILIP, Flatbush, L. I.,  
 1 fossil (*Spirifer mucronatus*), Grace County, N. Y.;  
 4 obsidian, Yellowstone National Park.

LEVISON, WALLACE GOOLD, Brooklyn, N. Y.,  
 2 specimens of muscovite from Danbury, N. H., and  
 Spruce Pine, N. C.

LOW, Mrs. C. E., Brooklyn, N. Y.,  
 100 minerals.

REID, Miss S. B.,  
 Garnets in matrix, Monhegan, Me. ;  
 Emery, Naxos, Greece. Invertebrates. *Salpa* sp.

SPICER, Rev. J. L., New York City,  
 Slab of ripple-marked sandstone, from Middle Falls,  
 Washington County, N. Y.

THAYER, Dr. L. O.,  
 Garnets in granite schist.

## PURCHASE

MUSEUM COLLECTION FUND, 1912,  
 63 minerals.

## EXCHANGE

SIMMONS, GEORGE O., Brooklyn, N. Y.,  
 4 minerals, as follows:  
 Hematite crystal, River Elba ;  
 Thaumasite and pectolite, New Jersey ;  
 Natrolite rosette, Paterson, N. J. ;  
 Heulandite, apophyllite and analcrite, Paterson, N. J.

SPICER, Rev. J. L., New York City,  
 24 specimens of minerals, rocks and fossils from various localities, United States and foreign.

## COLLECTION

350 lbs. cave minerals and rocks, Wyandotte, Ind.

## MISCELLANEOUS ACCESSIONS

## GIFTS

FOX, Mrs. WILLIAM B., Brooklyn, N. Y.,  
 1 musical valve-horn, used three generations ago.

HARRIS, Miss CAROLINE E., Utica, N. Y.,  
 Cashmere shawl.

KITTREDGE, Miss E. M., Spring Valley, N. Y.,  
 Indian playing ball, Dayton, Ohio.

## CHILDREN'S MUSEUM

## HISTORICAL OBJECTS

BUTLER, Mrs. E. B., Brooklyn, N. Y.,  
 Corset (home-made), hoop-skirt, book, needle-book,  
 card-case, beaded collar, dressed doll;  
 Daguerreotype.

HOLCOMB, BENTON, Simsbury, Conn.,  
 1 Celt hatchet;  
 5 arrowheads.

MACVEAGH, FRANKLIN, Secretary of the Treasury,  
 25 Confederate bills.

MATTHEWS, GARDINER D., Brooklyn, N. Y.,  
 Sextant and telescope.

MURPHY, ROBERT CUSHMAN, Brooklyn, N. Y.,  
 Spectacles worn by Dorothy Merna Murphy in South  
 Brooklyn in 1817.

SMITH, Mrs. JEMIMA, Derby, Conn.,  
 1 dressed doll in Scotch Highland (male) costume.  
 From Arbroath, Scotland.

TURNER, N. A., Brooklyn, N. Y.,  
 1 copy of the "Only Original, First Papers," printed  
 direct from type carried around the cylinders of  
 the "Rotary Printing Press," invented by Jeptha  
 A. Wilkinson;  
 1 button of the Fifty-ninth Regiment;  
 1 description of said button.

UNDERHILL, Mrs. CATHERINE L., Brooklyn, N. Y.,

Historical objects: Fabric appliquéd, bouquet of flowers in frame. Colored print of the Duke of Cumberland;  
 2 shingles from block house at Herrick's Pond;  
 Map of New York in 1811;  
 Hasp and nails, etc.;  
 Pair of spectacles and case (about 1800).

Woods, Miss LOTTIE, San Francisco, Cal.,  
 Doll made of a piece of kelp.

ZABRISKIE, Mrs. ORLENA A., Brooklyn, N. Y.,  
 Spinning wheel, or wool wheel.

#### NATURAL HISTORY OBJECTS

##### MAMMALS

NICOLAY, ALLAN, Brooklyn, N. Y.,

3 white light-bellied field mice (adult and 2 young).

STRUTZENBURG, Miss MAY, Brooklyn, N. Y.,  
 Bat, living.

WILLIAMS, Mr. W. H. H., Brooklyn, N. Y.,  
 Angora cat, in the flesh.

ZOBLE, VICTOR and VICTORIA,  
 Living common squirrel monkey.

##### BIRDS

ARCHBOLD, Masters KENNETH and HENRY SOHL,  
 Olive-backed thrush, in the flesh.

DE AYALA, Miss JOSEPHINE, Brooklyn, N. Y.,  
 Brown thrasher, in the flesh.

HEARN, EUGENE, Brooklyn, N. Y.,  
 2 South American parakeets, living.

LAWSON, Mrs. E., Brooklyn, N. Y.  
 Rose-breasted cockatoo, living.

McMAHON, Master JOHN, Brooklyn, N. Y.,  
 Yellow-bellied sapsucker.

McDOWELL, Mrs. CHARLES, Brooklyn, N. Y.,  
 1 whip-poor-will, in the flesh.

OHLS, Mrs. M. B., Brooklyn, N. Y.,  
 Brazilian parrot, in the flesh.

OTTO, Mrs. C. L., Brooklyn, N. Y.,  
 Nest of chimney-swift.

ROMANO, ANTHONY, Brooklyn, N. Y.,  
 1 living specimen of Florida gallinule.

STUTZER, HERMAN, Brooklyn, N. Y.,  
 Yellow-bellied sapsucker, in the flesh.

#### REPTILES

NICOLAY, ALLAN, Brooklyn, N. Y.,  
 Soft-shell turtle (young—living).

LEHRENKRAUS, Mrs. J., Brooklyn, N. Y.,  
 Snapping turtle, living.

MCCARTHY, Miss DOROTHY, Brooklyn, N. Y.,  
 Alligator, young, living.

WINTERNITZ, SAMUEL, Brooklyn, N. Y.,  
 Chameleon, living.

#### AMPHIBIANS

GRAEVE, Miss, Brooklyn, N. Y.,  
 Spotted salamander.

#### INSECTS

DALE, Mrs. J. M., Brooklyn, N. Y.,  
 Specimens of butterflies and beetles.

LEE, Miss MARY D., Brooklyn, N. Y.,  
 30 specimens of insects.

SLOCUM, Miss ANNA D., Boston, Mass.,  
Tree butterfly, from Mexico.

UNITED STATES NATIONAL MUSEUM, Washington, D. C.,  
54 specimens of coleoptera.

#### PLANTS

BIRDSALL, Master ROBERT B.,  
Vivarium of growing plants.

#### MINERALS AND FOSSILS

PIERSON, Dr. F. B., Brooklyn, N. Y.,  
40 minerals and fossils.

#### BOOKS, ILLUSTRATIONS

Bird Lovers' Club, Miss M. F. DAY, Secretary, Brooklyn,  
N. Y.,

Handbook of Birds of Eastern North America, 8th  
rev. ed.

BOSSHARD, Miss THEODORA, Brooklyn, N. Y.,

Copy of New York *Sun* (date, Monday, October 14,  
1833, No. 36).

BOWEN, Miss AGNES E., Brooklyn, N. Y.,

Chromo-lithograph of the Washington coat-of-arms.

DE LA TORRE BUENO JOHN, White Plains, N. Y.,

4 unbound volumes of "The Guide to Nature."

9 unbound volumes of "Ohio Naturalist."

HUNTING, H. R., Springfield, Mass.,

4 small books.

#### MISCELLANEOUS

LEHRENKRAUS, Mrs. J., Brooklyn, N. Y.,

Aquarium, with metal frame, and apparatus for run-  
ning water. Also mahogany table base.

PEARSALL, Mrs. R. F., Brooklyn, N. Y.,

Glass breeding jar with metal base.

## LIBRARIES OF THE MUSEUMS

The use of the libraries of the museums has increased to a marked extent during recent years. The increased use at the Central Museum is doubtless due to the fact that adequate rooms for the housing of its collections in the New East Wing were provided early in 1908.

The library of the Children's Museum has outgrown its accommodations and is badly in need of additional space.

The library at the Central Museum covers the museum subjects, namely Art, Natural History and Ethnology and is scholarly and monographic in character, while at the Children's Museum is adapted to the needs of children and teachers. Both libraries are for the free reference use of the public.

Much serious work has been done in the library by visitors as well as by the Museum staff. Among the most important gifts were about 150 volumes on Fish and Fisheries bequeathed by the late EUGENE G. BLACKFORD, one of the Trustees; a very beautiful work in ten volumes on "Oriental Ceramic Art, illustrated by examples from the collection of W. T. WALTERS," from Mr. CARL H. DE SILVER, and many volumes of periodicals and publications of societies from the Long Island Historical Society. About 81 books and pamphlets were purchased from the library of the late JOHN LAFARGE, the artist.

## ACCESSIONS—CENTRAL MUSEUM LIBRARY

From July 1, 1912, to June 30, 1913.

	Bound	Unbound
By purchase .....	152	90
By gift .....	417	487
By exchange .....	21	16
By binding .....	288	
	—	—
	878	593
	852	—
Withdrawn .....	26	
	—	—
	852	

Bound volumes in the Library July 1, 1913, 21,257.

## ACCESSIONS—CHILDREN'S MUSEUM LIBRARY

From July 1, 1912 to June 30, 1913

By purchase .....	112
By gift .....	52
By binding .....	63
	—
Total number of books added.....	227
Withdrawn or lost .....	16
Number in Library July 1, 1913.....	6,547

RECENT ACTS OF THE LEGISLATURE AFFECT-  
ING THE INSTITUTE.

CHAPTER 618 OF THE LAWS OF 1906  
AN ACT

To amend chapter five hundred and nine of the laws of eighteen hundred and ninety-seven, entitled "An Act to provide for the establishment of a Botanic Garden and Arboretum on park lands in the City of Brooklyn and for the care of the same."

*The People of the State of New York, represented in Senate and Assembly, do enact as follows:*

SECTION 1. Chapter five hundred and nine of the laws of eighteen hundred and ninety-seven, entitled "An Act to provide for the establishment of a Botanic Garden and Arboretum on park lands in the City of Brooklyn and for the care of the same" is hereby amended so as to read as follows:

§ 1. The Park Commissioner of the City of Brooklyn is hereby authorized and required to set apart and appropriate all that portion of Prospect Park bounded northerly by the Eastern Parkway, easterly by Washington avenue, southerly by the line formerly dividing the City of Brooklyn from the late Town of Flatbush, and westerly by Flatbush avenue, excepting only such lands as have been reserved for the Prospect Hill reservoir, as have been leased to the Brooklyn Institute of Arts and Sciences, and as have been set apart and designated by the Mayor and Park Commissioner of the City of Brooklyn as a site for the Brooklyn Public Library, for the establishing and maintaining thereon of a Botanic Garden and Arboretum for the collection and culture of plants, flowers, shrubs and trees, the advancement of botanical science and knowledge, and the prosecution of original researches therein and in kindred subjects; for affording instruction in the same, and for the

prosecution and exhibition of ornamental and decorative horticulture and gardening, and for the entertainment recreation and instruction of the people, and the said lands so set apart and appropriated shall be used for no other purposes than those authorized by this act.

§ 2. Whenever the Brooklyn Institute of Arts and Sciences, incorporated by chapter one hundred and seventy-two of the laws of eighteen hundred and ninety, shall have raised or secured by private subscription the sum of fifty thousand dollars within one year from the passage of this act, the principal of which or the income thereof to be set apart and used by the said Institute for the purchase of plants, flowers, shrubs and trees, to be set out in said Botanic Garden or Arboretum, the Board of Estimate and Apportionment of the City of New York on the recommendation of the Board of Commissioners of Public Parks of said City of New York is hereby authorized in its discretion to enter into an agreement on behalf of said City with the said Brooklyn Institute of Arts and Sciences for the establishing and maintaining by said Institute of a Botanic Garden and Arboretum upon such terms and conditions as may be agreed to, on any or all the lands mentioned in section one of this act, excepting thereout the lands designated as a site for a public library by chapter five hundred and fifty-three of the laws of nineteen hundred and five, and on any of the lands lying between Washington avenue and Flatbush avenue acquired by the City of New York and bounded northerly by the line formerly dividing the old City of Brooklyn from the late Town of Flatbush, easterly by Washington avenue and southerly and westerly by Flatbush avenue. The plans for the said Botanic Garden and Arboretum shall be subject to the approval of the said Board of Park Commissioners. And said Board of Commissioners is thereupon hereby authorized to construct and equip, upon the

lands designated in said agreement and according to plans to be approved by them and by the Trustees of said Institute, suitable plant houses for the care and culture of tender or other plants, indigenous or exotic, and rooms for instruction in botany, the use of same upon completion to be transferred to the said Brooklyn Institute of Arts and Sciences for the purposes stated in this act; and for the purposes of providing means therefor it shall be the duty of the Comptroller of the City of New York, upon being thereto requested by the said Commissioners and upon being authorized thereto by the Board of Estimate and Apportionment and the Board of Aldermen of said City, to issue and sell corporate stock of the City of New York in the manner now provided by law aggregating the sum of one hundred thousand dollars.

§ 3. No intoxicating liquors shall be sold or allowed on the grounds set apart as above provided. For police purposes and for the maintenance of proper roads and walks, the said ground shall remain subject at all times to the control of said Board of Commissioners of the Department of Parks; but otherwise, after the completion of said plant houses and rooms, and the construction of proper roads and walks therein by the Department of Parks, the said grounds and buildings shall be under the management and control of said Brooklyn Institute of Arts and Sciences. Said grounds shall be open and free to the public daily, including Sundays, subject to such restrictions only as to hours as the proper care, culture and preservation of the said garden may require; and its education and scientific privileges shall be open to all alike, male and female, upon such necessary regulations terms and conditions as shall be prescribed by the Board of Trustees of said Institute and approved by said Board of Commissioners of the Department of Parks.

§ 4. The Board of Estimate and Apportionment and

the Board of Aldermen of the City of New York on the making of an agreement as provided in paragraph two of this act, are hereby authorized on the recommendation of the said Park Board Commissioners, in their discretion, to appropriate annually a sum or sums of money for the care and maintenance by said Institute of said Botanic Garden and Arboretum and of the plant houses and rooms for instruction erected thereon.

§ 5. This act shall take effect immediately.

STATE OF NEW YORK, }  
OFFICE OF THE SECRETARY OF STATE, } ss.:

I have compared the preceding with the original law, and do hereby certify that the same is a correct transcript therefrom, and the whole of said original law.

Given under my hand and the seal of office of the Secretary of State, at the City of Albany, [SEAL] this 16th day of June, in the year one thousand nine hundred and six.

(Signed) HORACE G. TENNANT,  
Second Deputy Secretary of State.

CHAPTER 637 OF THE LAWS OF 1906  
AN ACT

To authorize a change in the site of the Astronomical Observatory of the Brooklyn Institute of Arts and Sciences and to provide for the erection and maintenance of said Observatory.

*The People of the State of New York, represented in Senate and Assembly, do enact as follows:*

§ 1. The Board of Estimate and Apportionment of the City of New York is hereby authorized in its discretion, upon the recommendation of the Board of Park Commissioners of said City, and with the consent of the

Board of Trustees of the Brooklyn Institute of Arts and Sciences, to designate and set apart a site for the Astronomical Observatory of the Brooklyn Institute of Arts and Sciences within the limits of those park lands lying between the site of the Museum of said Institute and Flatbush avenue, which were authorized and required to be set apart under chapter five hundred and nine of the laws of eighteen hundred and ninety-seven, and any amendments thereof, for a Botanic Garden and Arboretum under the supervision of said Brooklyn Institute of Arts and Sciences. And the said site when so designated shall be deemed a substitute for and in lieu of the site shown on the plans of the Museum of said Institute heretofore approved by the Mayor and Park Commissioner of the late City of Brooklyn.

§ 2. Whenever the Brooklyn Institute of Arts and Sciences, incorporated by chapter one hundred and seventy-two of the laws of eighteen hundred and ninety, shall have raised or secured by private subscription the sum of twenty-five thousand dollars within six months from the passage of this act, the principal of which or the income thereof to be set apart and used by said Institute for the equipment of said Astronomical Observatory with apparatus suitable for the giving of instruction in astronomy, the Board of Park Commissioners of said City of New York is hereby authorized to construct and equip upon the site designated under the authority of this act, in accordance with the plans to be approved by said Park Commissioners and by the Trustees of said Institute, an Astronomical Observatory. And for the purpose of providing means therefor it shall be the duty of the Comptroller of the City of New York, upon being authorized thereto by the Board of Estimate and Apportionment and the Board of Aldermen of said City, upon the request of said Commissioners, to issue and to sell corporate stock

of the City of New York in the manner now provided by law not exceeding the sum of one hundred and fifty thousand dollars. And the City of New York, acting by its Board of Estimate and Apportionment, is authorized to enter into an agreement, on the recommendation of the said Board of Park Commissioners with the said Brooklyn Institute of Arts and Sciences, for the administration of said Astronomical Observatory for the studying and teaching of astronomy for the benefit of the residents of said City, upon such terms and conditions as shall be set forth in said agreement. And upon the completion and equipment of said Observatory the use of the same shall be transferred to said Brooklyn Institute of Arts and Sciences for the purposes stated in this act. The cost of annual maintenance of said Astronomical Observatory shall be furnished by the City of New York as provided by sections six hundred and thirteen and six hundred and twenty-four of the Greater New York Charter, as contained in chapter four hundred and sixty-six of the laws of nineteen hundred and one, and as may be provided in said agreement.

§ 3. This act shall take effect immediately.

STATE OF NEW YORK,  
OFFICE OF THE SECRETARY OF STATE, } ss.:

I have compared the preceding with the original law, and do hereby certify that the same is a correct transcript therefrom, and the whole of said original law.

Given under my hand and the seal of office of the Secretary of State, at the City of Albany, [SEAL] this 16th day of June, in the year one thousand nine hundred and six.

(Signed) HORACE G. TENNANT,  
*Second Deputy Secretary of State.*

## CHAPTER 43

## AN ACT

To amend the Greater New York Charter, in relation to appropriations to the Brooklyn Institute of Arts and Sciences.

Became a law, March 12, 1907, with the approval of the Governor.

Passed, three-fifths being present.

*The People of the State of New York, represented in Senate and Assembly, do enact as follows:*

SECTION 1. Subdivision four of paragraph two of section two hundred and thirty of the Greater New York Charter, as re-enacted by Chapter four hundred and sixty-six of the laws of nineteen hundred and one, is hereby amended as follows:

4. The Brooklyn Institute of Arts and Sciences.

§ 2. This act shall take effect immediately.

STATE OF NEW YORK, }  
OFFICE OF THE SECRETARY OF STATE, } *ss.:*

I have compared the preceding with the original law on file in this office, and do hereby certify that the same is a correct transcript therefrom, and the whole of said original law.

[SEAL] Given under my hand and the seal of office of the Secretary of State, at the City of Albany, this third day of July, in the year one thousand nine hundred and seven.

(Signed) JAMES L. WHALEN,  
*Deputy Secretary of State.*

CHAPTER 120 OF THE LAWS OF 1907  
AN ACT

To authorize the erection of a fireproof children's museum building in the Borough of Brooklyn, City of New York, in place of the present building, and the designation or acquisition of a site therefor, and to provide for the care and maintenance of the same.

Became a law, April 3, 1907, with the approval of the Governor.

Passed, three-fifths being present.

Accepted by the city.

*The People of the State of New York, represented in Senate and Assembly, do enact as follows:*

Section 1. The City of New York, acting by its Board of Estimate and Apportionment, is hereby authorized at its discretion to cause to be constructed and equipped in or near Bedford Park, in the Borough of Brooklyn, City of New York, by the Park Commissioner of the Boroughs of Brooklyn and Queens in said city, a suitable fireproof children's museum building on a site to be designated by said Board of Estimate and Apportionment upon the recommendation of said Park Commissioner and with the approval of the Board of Trustees of the Brooklyn Institute of Arts and Sciences, incorporated by chapter one hundred and seventy-two of the laws of eighteen hundred and ninety, and upon plans and specifications to be approved by said Park Commissioner and said Board of Trustees of said Institute, at an aggregate cost not exceeding one hundred and seventy-five thousand dollars. And for the purpose of providing means therefor, it shall be the duty of the Comptroller of the City of New York, upon being authorized thereto by the Board of Estimate and Apportionment, and

the Board of Aldermen of said city, to issue and to sell corporate stock of the City of New York in the manner now provided by law, aggregating the sum of one hundred and seventy-five thousand dollars.

§ 2. And the said City of New York, acting by the Board of Estimate and Apportionment, is hereby authorized to enter into an agreement on the recommendation of the Board of Park Commissioners of the said city with the said Brooklyn Institute of Arts and Sciences for the continuance, development, administration and maintenance of a children's museum in the said fireproof children's museum building by said Institute for the benefit of the residents of said city, and especially for the instruction of students in the public and private schools of said city upon such terms and conditions as shall be set forth in said agreement. Upon the completion of said children's museum building, the use of the same shall be transferred to said Institute, to be used by it for a children's museum, and when so transferred the collections made by the said Institute and now contained in the present children's museum building shall be transferred to the new children's museum building and be there arranged and increased by said Institute. And the cost of the annual maintenance of said children's museum shall be defrayed by the said City of New York as provided by sections six hundred and thirteen and six hundred and twenty-four of the Greater New York Charter, as contained in Chapter four hundred and sixty-six of the laws of nineteen hundred and one, and as may be provided in said agreement.

§ 3. And in case of the Board of Estimate and Apportionment shall not designate as a site for said children's museum building any portion of said Bedford Park, then the said Board of Estimate and Apportionment is hereby authorized in its discretion to acquire title by purchase to such site in the immediate neighborhood of Bedford Park

as may be approved by said Park Commissioner and by the Board of Trustees of said Institute, in the manner provided by chapter twenty-one of the said Greater New York Charter. And the said site when so acquired shall be deemed a part of the park lands of the said City of New York, and shall be under the jurisdiction of the Board of Park Commissioners of said city. And for the purpose of providing means for the purchase of such site it shall be the duty of the Comptroller of the said city, upon being authorized thereto by the said Board of Estimate and Apportionment and the said Board of Aldermen, to issue and sell corporate stock of the City of New York in the manner now provided by law to an amount sufficient to defray the cost of such site.

§ 4. This act shall take effect immediately.

STATE OF NEW YORK,  
OFFICE OF THE SECRETARY OF STATE, { ss.:

I have compared the preceding with the original law on file in this office, and do hereby certify that the same is a correct transcript therefrom, and the whole of said original law.

[SEAL] Given under my hand and the seal of the office  
of the Secretary of State, at the City of Albany,  
this ninth day of July, in the year one thousand  
nine hundred and seven.

(Signed) JAMES L. WHALEN,  
*Deputy Secretary of State.*

CHAPTER 515 OF THE LAWS OF 1907  
AN ACT

To authorize the City of New York to acquire lands on Prospect Heights in the Borough of Brooklyn as sites for public buildings and to provide for the establishment and maintenance of public educational institutions.

Accepted by the city.

Became a law, June 17, 1907, with the approval of the Governor.

Passed, three-fifths being present.

*The People of the State of New York, represented in Senate and Assembly, do enact as follows:*

SECTION 1. The Board of Estimate and Apportionment of the City of New York is hereby authorized in its discretion to acquire title to any or all of the lands unimproved at the time of the passage of this act, located on Prospect Heights in the Borough of Brooklyn in the said city not already the property of the city and included within the city blocks designated on the Kings County land map authorized by chapter three hundred and sixty-five of the laws of eighteen hundred and ninety-four, and filed in the office of the Register of Kings County on December fifteenth, eighteen hundred and ninety-four, and known as numbers eleven hundred and seventy, eleven hundred and seventy-one, eleven hundred and seventy-two, eleven hundred and seventy-six, eleven hundred and seventy-nine, and eleven hundred and eighty, and also city lots numbers thirty-five to forty-one, inclusive, improved or unimproved, in the block known on said map as numbers ten hundred and sixty-six, as sites for public buildings for educational, judiciary, administrative and other public purposes.

§ 2. The Board of Estimate and Apportionment is hereby further authorized in its discretion to designate

and set apart on such lands as may be acquired by the city under section one of this act, together with other lands already owned by the city included within the said blocks numbered on said map eleven hundred and seventy-one, eleven hundred and seventy-two and eleven hundred and seventy-nine, sites for public buildings from time to time as they may be required in the interest of the city.

§ 3. For the purpose of providing means for the purchase or acquisition of lands described in section one of this act, it shall be the duty of the Comptroller of the said City of New York, upon being authorized thereto by the said Board of Estimate and Apportionment of said city, to issue and to sell corporate stock of the City of New York in the manner now provided by law, and in such sum or sums as shall be determined by the said Board of Estimate and Apportionment.

§ 4. And the said Board of Estimate and Apportionment is hereby further authorized to enter into an agreement or into agreements with any corporation or corporations now existing or that may hereafter be created for educational purposes, on such terms and conditions as may be expressed in such agreement or agreements, for the establishment and maintenance of one or more public educational institutions or parts thereof, upon sites designated in pursuance of section two of this act; provided nevertheless that no building or buildings shall be erected upon such sites until suitable plans and specifications therefor shall have been submitted to and approved by the said Board of Estimate and Apportionment and by the Art Commission of said city; and also provided that such educational institution or institutions, or parts thereof, shall be free, open and accessible to the general public under such regulations and on such terms of admission as may be approved by the said Board of Estimate and Apportionment.

§ 5. This act shall take effect immediately.

STATE OF NEW YORK,  
OFFICE OF THE SECRETARY OF STATE, }  
ss.:

I have compared the preceding with the original law on file in this office, and do hereby certify that the same is a correct transcript therefrom, and the whole of said original law.

[SEAL] Given under my hand and the seal of office of the Secretary of State, at the City of Albany, this third day of July, in the year one thousand nine hundred and seven.

(Signed) JAMES L. WHALEN,  
*Deputy Secretary of State.*

## CHAPTER 178 OF THE LAWS OF 1911

### AN ACT

To amend chapter five hundred and nine of the laws of eighteen hundred and ninety-seven, entitled "An act to provide for the establishment of a Botanic Garden and Arboretum on park lands in the City of Brooklyn and for the care of the same," generally.

Accepted by the city.

Became a law May 20, 1911, with the approval of the Governor.

Passed, two-thirds voting in favor thereof.

*The People of the State of New York, represented in Senate and Assembly, do enact as follows:*

SECTION 1. Chapter five hundred and nine of the laws of eighteen hundred and ninety-seven, entitled "An act to provide for the establishment of a Botanic Garden and

Arboretum on park lands in the City of Brooklyn and for the care of the same," as amended by chapter six hundred and eighteen of the laws of nineteen hundred and six, is hereby amended so as to read as follows:

§ 1. The Park Commissioner of the City of New York, having jurisdiction of the Boroughs of Brooklyn and Queens is hereby authorized and required to set apart and appropriate all that portion of Prospect Park bounded northerly by the Eastern Parkway, easterly by Washington avenue, southerly by the line formerly dividing the City of Brooklyn from the late Town of Flatbush, and westerly by Flatbush avenue, excepting only such lands as have been reserved for the Prospect Hill reservoir, as have been leased to the Brooklyn Institute of Arts and Sciences, for the establishing and maintaining thereon of a Botanic Garden and Arboretum for the collection and culture of plants, flowers, shrubs and trees, the advancement of botanical science and knowledge, and the prosecution of original researches therein and in kindred subjects; for affording instruction in the same, and for the prosecution and exhibition of ornamental and decorative horticulture and gardening, and for the entertainment, recreation and instruction of the people.

§ 2. Whenever the Brooklyn Institute of Arts and Sciences, incorporated by Chapter one hundred and seventy-two of the laws of eighteen hundred and ninety, shall have raised or secured by private subscription the sum of fifty thousand dollars within one year from the passage of this act, the principal of which or the income thereof to be set apart and used by the said Institute for the purchase of plants, flowers, shrubs and trees, or for other purposes in connection with said Botanic Garden and Arboretum, the Board of Estimate and Apportionment of the City of New

York on the recommendation of the Board of Commissioners of public parks of the said City of New York is hereby authorized in its discretion to enter into an agreement on behalf of said city with the said Brooklyn Institute of Arts and Sciences for the establishing and maintaining by said Institute of a Botanic Garden and Arboretum upon such terms and conditions as may be agreed to, on any or all the lands mentioned in section one of this act, excepting thereout the lands designated as a site for a Public Library by Chapter five hundred and fifty-three of the laws of nineteen hundred and five, and also excepting therefrom such lands as have been designated and set apart by the Board of Park Commissioners and the Board of Estimate and Apportionment of the said City of New York as a site for an Astronomical Observatory in pursuance of Chapter six hundred and thirty-seven of the laws of nineteen hundred and six; and on any of the lands lying between Washington avenue and Flatbush avenue acquired or that may hereafter be acquired by the City of New York and bounded northerly by the line formerly dividing the old City of Brooklyn from the late Town of Flatbush, easterly by Washington avenue and southerly and westerly by Flatbush avenue. The plans for the said Botanic Garden and Arboretum shall be subject to the approval of the said Board of Park Commissioners. And said Board of Commissioners is thereupon hereby authorized to construct and equip, upon the lands designated in said agreement and according to plans to be approved by them and by the Trustees of said Institute, suitable plant houses for the care and culture of tender or other plants, indigenous or exotic, and rooms for instruction in botany, the use of same upon completion to be transferred to said Brooklyn Institute of Arts and Sciences for the purposes stated in this act, and for the purposes of proving means therefor, and of providing means for grading, soil additions, and

other permanent improvements in said Garden and Arboretum it shall be the duty of the Comptroller of the City of New York, upon being thereto requested by the said Commissioners, and upon being authorized thereto by the Board of Estimate and Apportionment and the Board of Aldermen of said city, to issue and sell corporate stock of the City of New York in the manner now provided by law.

§ 3. And the Board of Estimate and Apportionment of the City of New York, on the recommendation of the Board of Park Commissioners of said City of New York, is hereby authorized in its discretion from time to time to amend the agreement already authorized by Chapter six hundred and eighteen of the laws of nineteen hundred and six or to enter into a supplementary agreement or supplementary agreements altering the boundaries of the said Botanic Garden and Arboretum so as to include any portion of the lands now or hereafter reserved for the Prospect Hill reservoir which may be from time to time designated by the Commissioner of Water Supply, Gas and Electricity, or his successor or successors, as no longer needed for reservoir purposes; and the Board of Estimate and Apportionment of the City of New York is further authorized in its discretion to alter the boundary line between the lands leased by the City of New York to the Brooklyn Institute of Arts and Sciences as a site for a Museum of Arts and Sciences and Libraries and lands now leased or that may hereafter be leased by said city to said Institute for the purposes of a Botanic Garden and Arboretum as may be agreed to between the said Board of Estimate and Apportionment and the said Brooklyn Institute of Arts and Sciences.

§ 4. No intoxicating liquors shall be sold or allowed on the grounds set apart as above provided. For police pur-

poses and for the maintenance of proper roads and walks, the said grounds shall remain subject at all times to the control of said Board of Commissioners of the Department of Parks; but otherwise, after the completion of said plant houses and rooms, and the construction of proper roads and walks therein by the Department of Parks, the said grounds and buildings shall be under the management and control of said Brooklyn Institute of Arts and Sciences. Said grounds shall be open and free to the public daily, including Sundays, subject to such restrictions only as to hours as the proper care, culture and preservation of the said garden may require; and its educational and scientific privileges shall be open to all alike, male and female, upon such necessary regulations, terms and conditions as shall be prescribed by the Board of Trustees of said Institute and approved by said Board of Commissioners of the Department of Parks.

§ 5. The Board of Estimate and Apportionment and the Board of Aldermen of the City of New York on the making of an agreement as provided in paragraph two of this act, are hereby authorized on the recommendation of the said Board of Park Commissioners, in their discretion, to appropriate annually a sum or sums of money for the care and maintenance by said Institute of said Botanic Garden and Arboretum and of the plant houses and rooms for instruction erected thereon.

§ 2. The act shall take effect immediately.

STATE OF NEW YORK,  
OFFICE OF THE SECRETARY OF STATE, } ss.:

I have compared the preceding with the original law on file in this office, and do hereby certify that the same is a

correct transcript therefrom, and the whole of said original law.

[SEAL] Given under my hand and the seal of office of the Secretary of State, at the City of Albany, this thirty-first day of May, in the year one thousand nine hundred and eleven.

(Signed) JOSE E. PIDGEON,  
*Second Deputy Secretary of State  
 and Chief Clerk.*

The Legislature also passed the following measure which was signed by Governor Dix, on July 18th, when it became Chapter 696 of the Laws of 1911.

CHAPTER 696 OF THE LAWS OF 1911  
 AN ACT

To authorize the City of New York to enter into a contract or contracts with the Brooklyn Institute of Arts and Sciences, for the establishment, maintenance, continuance or development and extension of a museum of arts and sciences and libraries and branch museums on park lands in the City of New York, Boroughs of Brooklyn and Queens, and to provide for the equipment, care and maintenance of the same.

*The People of the State of New York, represented in Senate and Assembly, do enact as follows.*

SECTION 1. The City of New York acting by its Board of Estimate and Apportionment is hereby authorized to provide for the continuance of the work of construction of the Museum building on that part of Prospect Park bounded by the Eastern Parkway on the north; Washington Avenue on the east; a line parallel to old President Street and one hundred feet south of the southerly line of said street on the south and on the west by the easterly line of the land

reserved for the Prospect Hill Reservoir and in continuation thereof, the same being the site of the Museum of Arts and Sciences leased on December twenty-third, eighteen hundred and ninety-three to the corporation of the Brooklyn Institute of Arts and Sciences for the term of one hundred years, and to further provide for the grading, soiling and turfing of the lands about said Museum building on said site, for the construction of proper roadways, walks and approaches to said museum on said site; for the construction of boundary walls or retaining walls; for providing with furniture, fixtures, apparatus and equipment the said museum and the several departments thereof, and for providing for the proper care and maintenance of said building and its contents and the grounds adjacent thereto on said site, and for insuring the Museum building and its contents against fire, for insuring the employees of said institute engaged in said Museum building and on said site from accident, and for carrying out the plans and purposes of said institute in said Museum building. And the said Board of Estimate and Apportionment is authorized at its discretion to enlarge the site of said Museum building.

§ 2. For the purpose of continuing the work of construction on the said Museum building and of making permanent improvements in said building and on the lands adjacent thereto within the boundary lines of the site of said building, the Board of Estimate and Apportionment and the Board of Aldermen of said city are hereby authorized on the recommendation of the Board of Park Commissioners of said city to provide for the issuance of corporate stock of the City of New York, and it shall be the duty of the comptroller of said city, upon being authorized thereto by the Board of Estimate and Apportionment and the said Board of Aldermen, to issue corporate stock of the City of New York in the manner now provided by law.

§ 3. The Board of ~~Estimate~~ and Apportionment of the

City of New York is hereby authorized to enter into an agreement with the corporation of the Brooklyn Institute of Arts and Sciences for the establishment, continuance, maintenance and development by said institute of a Museum of Arts and Sciences on the site described in section one of this act, upon such terms and conditions as may be approved by the Board of Park Commissioners of said city, and as may be agreed to between said Board of Estimate and Apportionment representing said city and the Board of Trustees of the Brooklyn Institute of Arts and Sciences representing the said institute. The Board of Estimate and Apportionment and the Board of Aldermen of the City of New York on the making of an agreement as herein provided are hereby authorized on the recommendation of the said Board of Park Commissioners in their discretion to appropriate annually a sum or sums of money for the furnishing of the museum building as located on the site described in section one of this act, and for the care and maintenance of the same by said institute and for providing necessary apparatus, furniture, and equipment and for the care of the grounds about said museum within said site, and for carrying out the plans and purposes of said institute in said Museum building.

§ 4. And in like manner, the said City of New York is authorized to enter into a contract with the said Brooklyn Institute of Arts and Sciences for the care, maintenance and development of branch museums on park lands in the Boroughs of Brooklyn and Queens, as they may be recommended from time to time by the Board of Park Commissioners of said city and may be authorized by the Board of Estimate and Apportionment of said city.

§ 5. This act shall take effect immediately.

STATE OF NEW YORK,  
OFFICE OF THE SECRETARY OF STATE, } *ss.:*

I have compared the preceding with the original law on file in this office, and do hereby certify that the same is a correct transcript therefrom, and the whole of said original law.

Given under my hand and the seal of office of the Secretary of State, at the City of Albany, this eighth day of August in the year one thousand nine hundred and eleven.

(Signed)      J. PIDGEON,  
*Second Deputy Secretary of State.*

## CHAPTER 130 OF THE LAW OF 1912

### AN ACT

To amend chapter one hundred and twenty of the laws of nineteen hundred and seven, entitled "An act to authorize the erection of a fireproof Children's Museum Building in the Borough of Brooklyn, City of New York, in place of the present building, and the designation or acquisition of a site therefor, and to provide for the care and maintenance of the same," in relation to the cost of such building.

Became a law April 4, 1912, with the approval of the Governor.

Passed, three-fifths being present.

Accepted by the City.

*The People of the State of New York, represented in Senate and Assembly, do enact as follows:*

SECTION 1. Section one of chapter one hundred and twenty of the laws of nineteen hundred and seven, entitled "An act to authorize the erection of a fireproof children's

museum building in the borough of Brooklyn, city of New York, in place of the present building, and the designation or acquisition of a site therefor, and to provide for the care and maintenance of the same," is hereby amended to read as follows:

§ 1. The city of New York, acting by its Board of Estimate and Apportionment, is hereby authorized at its discretion to cause to be constructed and equipped in or near Bedford Park in the Borough of Brooklyn, city of New York, by the Park Commissioner of the Borough of Brooklyn in said city, a suitable fireproof Children's Museum building on a site to be designated by said Board of Estimate and Apportionment upon the recommendation of said Park Commissioner and with the approval of the Board of Trustees of the Brooklyn Institute of Arts and Sciences, incorporated by chapter one hundred and seventy-two of the laws of eighteen hundred and ninety, and upon plans and specifications to be approved by said Park Commissioner and said Board of Trustees of said Institute. And for the purpose of providing means therefor it shall be the duty of the comptroller of the city of New York, upon being authorized thereto by the Board of Estimate and Apportionment and the Board of Aldermen of said city, to issue and to sell corporate stock of the city of New York in the manner now provided by law.

§ 2. This act shall take effect immediately.

STATE OF NEW YORK, { ss.:  
OFFICE OF THE SECRETARY OF STATE, }

I have compared the preceding with the original law on file in this office, and do hereby certify that the same is a correct transcript therefrom and of the whole of said original law.

(Signed) EDWARD LAZANSKY,  
*Secretary of State.*

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